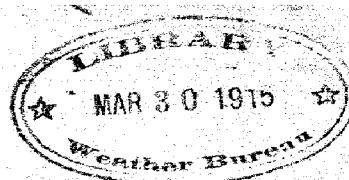


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JAMAICA

WEATHER REPORT

FOR THE MONTH OF
JANUARY, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	ft. 8	in. 29.958	in. 29.913	78.0	80.5	82.3	73.1	9.2	83.5	5*	65.5	21	18.0
Kingston	24	29.931	29.832	71.1	82.3	86.2	70.3	15.9	89.9	29	66.8	25	23.1
Negril Point Light House	33	29.942	29.892	72.5	81.7	84.1	70.1	14.0	86.7	10	67.0	26	19.7
Castleton Gardens	496	..	..	66.8	81.1	85.1	62.3	22.8	90	6	58	24*	32
Hope Gardens†	668	29.963	29.859	68.8	81.0	85.5	67.2	18.3	90	3	64	27	26
Stony Hill Indus. School	1,400	..	..	67.8	78.1	80.5	65.6	14.9	84	2*	63	24*	21
Hill Gardens	4,900	25.280	25.232	61.5	63.2	66.2	54.5	11.7	70	18	52	26*	18

STATIONS.	Elevation.	Dew Point and Humidity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.					7 a.m.	3 p.m.			7 a.m.	3 p.m.				
Morant Pt. Light House	ft. 8	72.4	82	73.1	78	4.30	313	N.E. 17	N.E. 15	3.8	1.0	0.6	2.7	1.0	1.1		
Kingston	24	64.5	80	71.0	69	1.11	173	by E. N.E. 5.4	by E. S.E. 11.5	3.4	0.1	0.1	3.3	2.4	0.2		
Negril Point Light House†	33	67.7	85	72.4	70	3.43	223	by N. E. 3.5	S.S.E. 12.2	1.7	1.0	0.0	2.6	4.0	0.0		
Castleton Gardens	496	64.8	93	70.9	69	6.02	..	..	..	..	..	..	..	..	..
Hope Gardens	668	65.2	87	69.4	64	3.70	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	65.1	91	71.9	81	5.27	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	57.0	83	61.3	93	7.76	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House. Wind 11 p.m. N.E. 8.4.

Plumb Point Light House { Average No. of Miles of wind per diem 288
Greatest on the 18th 590
Least on the 31st 105

National Oceanic and Atmospheric Administration

Climate Database Modernization Program

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LASON
Imaging Subcontractor
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Beltsville, MD 20704-1387
March 28, 2002

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

JANUARY, 1915.					
NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
Manchioneal	In. 8.34	In. 2.03	1	12	5.94
Ecclesdown	13.98	2.10	1	21	
Spring Valley, Portland	12.77	2.02	1	21	
Bath	9.27	3.28	1	21	6.26
Boston	8.45	1.80	13	10	9.50
Moore Town	13.95				18.55
Port Antonio	12.45	3.20	1	18	9.10
Fellowship	12.35	3.15	1	24	14.16
Windsor, Portland					
Johnson River Bridge	7.11	4.07	1	17	3.59
Shrewsbury	13.23	2.60	14	9	20.02
Cedar Valley, St. Thos.	9.11	4.84	1	13	4.46
Hope Bay	10.55	2.70	1	15	
Moy Hall, St. Thos.	12.81	3.50	1	12	3.46
Brooklodge	7.23	3.34	1	17	
Lennox	11.17	3.25	16	14	
Farm Hill	8.63	3.60	22	7	6.79
Hill Gardens	7.76				7.09
Buff Bay	7.20	2.32	16	9	10.22
Vinery	9.88	2.90	16	9	
Windsor Castle, Port.	7.42	3.21	16	6	
Greenville, Portland	10.08	3.00	21	14	
Mt. Holstein	6.33	1.75	21	20	14.03
Irish Town	5.90	1.29	1	8	2.49
Rose Hill	6.47	1.55	20	10	
Hardware Gap	9.00				4.95
Stony Hill Ind. School	5.27	1.20	1	13	3.30
Castleton Gardens	6.02				8.87
Lawrence Tavern	4.34	1.00	5	8	1.95
Cedar Valley, Red Hills	5.29	1.33	5	8	
Carew Castle	5.51	1.05	31	17	2.60
Agualta Vale	8.85	2.93	21	11	
Water Valley	8.01	2.72	21	11	7.90
Albany, Ry. Station	8.56	3.21	21	10	
Platfield	5.41	1.65	21	12	
Richmond, St. Mary	8.71	2.74	21	10	6.18
Hampstead, St. Mary	12.63	3.66	21	17	
Troja	7.15	2.50	22	10	
Lucky Hill	9.77	2.65	21	10	
Rio Hoe	7.07	1.83	14	13	5.47
Unity Valley	7.47	1.82	14	17	4.69
Moneague	4.72	1.62	14	12	4.18
Claremont	5.51	1.48	21	10	6.12
Albion, St. Ann	6.74	1.70	21	16	5.15
Averham Park	5.80	1.65	21	12	6.88
Means	8.11				

JANUARY, 1915.					
NORTHERN DIVISION.	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
Port Maria	In. 4.57	In. 0.78	13	14	6.72
Ocho Rios	1.93	1.25	14	13	5.42
Bogue, Ocho Rios	5.21	1.50	16	5	
Drax Hall	7.10	1.90	16	12	4.84
Liberty Hill	7.20	2.20	14	6	
St. Ann's Bay	5.00	1.55	16	15	5.01
Seville	6.75	1.90	16	12	5.61
Richmond Estate					
Llandoverly	6.63	1.54	16	10	6.62
Runaway Bay	5.60	1.50	1	8	
Brown's Town	3.52	0.96	13	9	5.41
Alexandria	3.83	0.80	14	8	
Chewmagna, St. Ann	3.33	0.75	21	11	2.70
Home Castle	6.75	1.95	20	6	5.39
Richmond Pen	2.90	0.95	21	6	3.48
Mahogany Hall	6.81	2.10	21	11	4.76
Barnstable*	9.24	2.20	21	10	
Brampton Bryan	13.54	4.20	20	19	4.12
Bryan Castle	13.90	4.00	21	15	4.66
Braco	12.50	6.05	21	13	4.17
Arcadia	19.46	6.03	21	14	4.38
Lancaster	13.30	6.23	21	10	4.59
Harmony Hall	12.23	4.65	21	16	3.97
Vale Royal	17.54	5.48	21	14	4.94
Colchis Pen	3.16	0.95	21	9	3.29
Swanswick*	11.80	4.15	21	12	
Georgia	12.88	5.20	20	11	3.96
Long Pond	13.71	5.14	20	7	4.55
Hyde Hall	14.19	5.20	20	14	3.67
Steelfield*	12.17	4.19	20	7	4.38
Ettingdon	13.02	4.55	20	14	2.92
Lottery	16.65	8.00	20	12	3.78
Falmouth	6.59	2.73	20	12	3.60
Florence Hall	9.33	5.30	21	9	
Good Hope	13.94	6.10	20	13	
Unity	7.31	3.60	21	10	
Kent	8.36	2.50	20	10	3.96
Gales Valley					
Canaan	15.78	7.40	20	13	3.08
Content	6.94	2.54	20	10	4.41
Bellfield	12.74	5.60	20	10	
Gulibro	14.59	5.91	20	21	3.15
Moor Park	8.88	4.00	20	15	4.19
Rose Hall	8.00	1.85	21	10	3.38
Running Gut	7.70	2.40	1	10	3.54
Cinnamon Hill	8.55	2.50	20	10	3.51
Success	7.95	1.85	20	10	3.84
Montego Bay	11.23	7.30	20	11	2.92
Catherine Hall	13.07	7.94	20	10	3.51
Retirement	12.55	5.88	20	17	2.00
King Gate	9.96	7.45	20	5	3.94
Round Hill					
Blue Hole	16.43	11.00	20	11	
Haughton Court*	8.52	4.21	20	6	
Lucea	7.65	2.30	20	9	3.07
Green Island, Police St.	3.85	2.05	20	9	
Means	8.58				

JANUARY, 1915.					
CENTRAL SUB-DIVISION.	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
Headworks, Rio Cobre	1.90	0.47	1	8	1.84
Linstead	2.34	0.65	21	9	2.15
Berkshire Hall	5.05	1.65	21	13	2.96
Point Hill	6.15	1.10	21	17	2.74
Marlie Hill	5.76	1.85	31	10	
Worthy Park	3.28	0.81	5	9	2.04
Croft Hill	3.99	0.78	5	11	
Chapelton	3.15	1.28	30	11	2.24
Danks Works*	4.36	1.55	30	10	1.89
Savoy House	3.77	1.38	30	14	2.29
Crooked River	5.75	1.50	30	13	
Trout Hall	4.79	1.93	30	9	
Cave Valley	4.20	1.50	16	21	2.26
Greenock					
Means	8.58				

* Gauge overflowed.

WEST-CENTRAL DIVISION.	JANUARY, 1915.					SOUTHERN DIVISION.	JANUARY, 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
Whitney	In. 4.30	In. 0.60	19	17	In. 2.68	Morant Point L. H.	In. 4.30	In. 1.17	1	16	In. 4.30
Mochó, Clarendon	3.00	1.00	12	6		Elliott Hill	8.02	2.32	2	23	
Baillieston	1.54	0.29	21		2.79	Pleasant Hill	7.61	2.04	1	25	
Brokenhurst						East Prospect	6.25	1.97	1	21	
Christiana	3.36	0.84	21	17	2.35	Morant Bay	6.97	3.22	1	17	2.70
Chudleigh	1.94	0.85	20	17		Easington	5.92	4.25	1	17	1.64
Shooter's Hill	3.99	0.99	30	18		Bull Bay	4.94	3.85	1	2	0.87
Spitzbergen	2.65	0.60	1	14		Bellevue					
Kendal, Manchester	2.98	0.76	11	6	2.39	Gordon Town	5.34	1.50	1	11	2.08
Marshall's Pen	4.30	1.14	1	14	2.85	Hope Gardens	3.70				1.77
Mandeville	4.75	1.10	19	11	3.04	King's House Gardens	2.48				1.22
Carlton, Mandeville	5.23	1.56	19	13	2.70	Halfway Tree	2.07	0.94	1	5	1.12
The Hill	2.82	1.15	1	7		Lunatic Asylum	1.69	1.27	1	6	0.72
Fairfield, Manchester	3.13	0.62	12	7	2.61	Parade Gardens					
Ulster Spring	12.98	2.00	13	11	3.06	Upper Elletson Road	1.99	1.45	1	4	
Freeman's Hall	4.90	1.00	21	10		Kingston P. W. Office	1.11	0.54	1	6	1.02
Albert Town	4.55	0.80	4	9		Plumb Point L. H.	1.41	0.70	1	5	0.80
Lowe River	4.90	1.25	21	9	2.92	Clifton Pen	1.88	1.00	1	4	
Troy	3.90	1.20	4	9	2.25	Quarantine Station	1.19	0.62	1	5	
Windsor Pen, Trel.	5.77	3.00	21	14	3.13	Spanish Town	1.90	0.47	1	8	1.52
Medina	5.72	1.47	5	12		Hog Hole, St. Catherine	2.13	1.00	30	8	1.71
Wallingford	3.44	1.34	20	19		Hartlands	2.07	1.05	1	6	1.78
Balaclava Police Station	5.20	1.85	20	14	1.71	Belmont, Guanaboa Vale	4.00	1.00	30	21	
Siloah	4.42	1.05	20	13	3.08	Old Harbour	3.11	1.10	12	10	2.07
Appleton Estate						May Pen	1.89	0.39	19	10	1.26
Maggotty	2.69	0.88	12	12	2.72	Hillside	3.11	1.35	30	8	
Butlers	3.11	0.57	19	11		Moreland	4.70	1.65	30	12	
Dromilly Pen	11.24	4.00	21	11		Dunkley's, Vere	2.65	0.57	1	10	1.33
Spring Vale	9.54	4.50	21	7		Dry River	2.55	0.47	19	15	
Garland						Denbigh	1.50	0.40	7	5	1.59
Mochó, Catadupa	8.46	1.70	21	4		Toll Gate	2.59	0.70	19	8	
Springfield, St. Elizabeth	2.96	1.16	21	12	2.04	Woodleigh	1.90	0.50	7	5	
Chesterfield, St. James						New Yarmouth	2.17	0.55	1	10	1.20
Catadupa Rly. Station	6.74	1.22	20	14		Exeter, Vere	3.20	0.82	1	6	1.64
Kempshot	14.02	5.04	21	19	3.98	Rhymesbury	3.23	0.86	19	14	1.01
Cambridge, St. James	8.87	1.43	21	15		Milk River	2.06	0.60	1	8	1.50
Ducketts						Clarendon Pk. Ry. St.	3.67	0.70	12	16	
New Market, Police St.	2.47	0.58	6	7		Victoria Town	4.12	1.04	19	8	1.80
The Bog, New Market	3.37	0.95	7	14		Hog Hole, S. Manch.	5.57	1.26	19	12	
Kew Park	5.86	1.27	20	12	2.32	Stone's Hope	4.35	1.16	19	10	2.68
Knockalva	10.66	3.45	20	14		Newport, Manchester	4.36	0.82	19	16	2.66
Ramble	11.74			13		Great Valley, Man.	3.74	0.75	11	15	2.49
Petersville	5.85	1.15	7	13	2.25	Alligator Pond	0.92	0.54	21	4	1.41
Darliston	4.40	0.70	4	15	2.93	Southfield, St. Elizabeth	2.61	0.60	19	12	
Bluefields	4.63	0.72	20	16	3.52	Lititz	1.12	0.48	12	9	
Whithorn	6.06	2.50	21	15	1.97	Long Hill					
Water Works Pen	5.52	2.10	4	11		Torrington	2.45	1.08	15	8	2.31
*Great Valley, Han.	14.05	4.20	13	6	4.68	Bethlehem, St. Eliz.	2.22	0.44	21	14	2.52
Prospect Park						Santa Cruz	2.35	0.84	31	7	2.82
Blackheath	3.52	1.78	20	13		Pedro Plains Police St.	1.08	0.40	12	8	2.04
Fontabelle, Westm.	4.52	1.11	21	11	1.94	Black River	1.74	0.37	21	12	1.63
Belleisle	3.42	2.05	20	12	1.80	Font Hill	0.90	0.40	20	3	1.88
Morgan's Bridge	5.68	1.93	21	9	1.82	Mount Edgecombe	3.89	0.57	7	14	
King's Vale Police St.	8.90	3.50	20	11	3.26	Sweet River	4.70	1.30	21	10	1.82
Means	5.55					Windsor, Sav.-la-mar	3.18	1.20	22	12	1.83
						Orchard	4.52	1.25	4	12	
						Sav.-la-mar	2.44	1.28	7	10	1.62
						Meylersfield	1.76	0.86	20	4	
						Retreat	2.39	0.85	21	6	1.57
						White Hall					
						Negril Point L.H.	3.43	0.93	20	10	1.34
						Means	3.03				

* Gauge overflow.

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

JANUARY.

1915.

Average.

In.

In.

North-Eastern Division

...

8.11

7.15

Northern

"

8.58

3.77

West-Central

"

5.55

2.85

Southern

"

3.03

1.81

The Island

...

6.32

3.88

The heaviest rainfall of 19.46 inches was recorded at Arcadia in Trelawny. The lowest rainfall 0.92 was recorded at Font Hill in the Southern division.

It is requested that for the future all communication to the Weather Office, be addressed to Montego Bay P.O

SHOCKS OF EARTHQUAKE IN JANUARY, 1915.

Date.

Standard Time

(Approx.)

Intensity.

Notes: where felt, etc.

2

3

30 p.m.

I.

Mt. Holstein, E. & W. 0.0 0

N. & S., 0.004 Double shock with interval one sec.

6

11

0 p.m.

I.

Billy Dun.

16

"

" "

I.

Mt. Holstein, N. & S., 0.007.

and at Buff Bay.

18

30 a.m.

III.

Glengoffe.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

Negril Point Light House. Mean Results for the year 1914. Elevation 33 feet.

Month. 1914.	Barometer.		Temperature.					Extremes for Month.			Dew Point and Humidity.			Rain-fall. inches.	Miles of Wind per diem.
	7 a.m.	3 p.m.	Mean	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Min.	Range	7 a.m.	3 p.m.		
	in.	in.	°	°	°	°	°	°	°	°	°	°	°		
January	29.989	29.945	75.2	71.3	80.3	82.7	68.6	14.1	85.5	61.0	24.5	65.7	74	2.12	214
February	30.010	29.959	75.9	72.2	80.8	83.7	69.0	14.7	88.5	63.6	24.9	64.8	66	1.83	233
March	30.001	29.957	77.0	72.9	80.4	83.2	69.6	13.6	85.8	63.5	22.3	66.0	68	4.67	272
April	29.966	29.924	77.9	76.9	81.4	84.5	70.9	13.6	86.7	65.5	21.2	69.9	72	4.00	202
May	29.962	29.925	79.4	79.1	82.6	86.0	71.9	14.1	88.5	69.6	18.9	70.3	72	9.83	180
June	29.967	29.939	80.3	80.0	83.6	86.9	72.7	14.2	90.0	69.4	20.6	70.3	71	5.53	168
July	29.994	29.962	81.7	80.2	86.1	88.3	74.0	14.3	91.5	70.4	21.1	69.3	66	2.53	197
August	29.975	29.944	80.3	79.0	83.5	87.5	73.3	14.2	89.5	69.8	19.7	71.3	78	8.59	178
September	29.926	29.898	80.7	79.4	84.2	87.7	73.4	14.3	88.8	70.9	17.9	71.4	73	4.69	174
October	29.909	29.862	80.4	78.8	84.2	87.0	73.5	13.5	90.2	69.6	20.6	71.6	68	5.29	223
November	29.906	29.857	78.6	76.2	82.9	85.5	71.7	13.8	88.5	67.6	20.9	70.5	71	4.60	210
December	29.942	29.891	78.5	74.5	84.1	86.1	71.4	14.7	88.8	67.6	21.2	68.3	67	2.95	200
Means	29.962	29.921	78.7	76.7	82.8	85.7	71.6	14.1	88.5	67.4	21.1	69.1	70		206

Total 56.63

Mean Results, continued. Negrit Point Light House.

Month 1914	Wind: from and Miles per hour			Clouds: in tenths of Sky.						Weather Conditions.
	7 A.M.	3 P.M.	11 P.M.	Lower.		Middle.		Upper.		
				7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	
January	E 8.0	SE 16.0	ENE 10.0	2.9	2.6	1.6	2.9	1.6	0.6	Fine on 5, Cloudy 8, Overcast 12, and Rain on 6 days. Lightning a few days. Th on 30th.
February	ENE 9.3	SE 13.0	ENE 9.7	2.0	1.5	1.8	4.4	0.0	0.0	Fine on 3, Cloudy 10, Overcast 6, and Rain on 9 days. Shocks of Earthquake on 14th and 28th.
March	NE 10.3	NE 14.9	NE 11.1	2.2	3.1	0.5	3.2	0.4	0.3	Fine on 8, Cloudy 5, Overcast 4, and Rain on 14 days.
April	E 7.3	SSE 12.1	ENE 7.5	2.9	4.1	0.2	4.5	2.1	0.0	Fine on 3, Cloudy 3, Overcast 11. Rain an 13 days; T on 29. L on a few days.
May	ENE 6.8	E 9.5	E by N 6.4	0.6	2.2	0.1	6.4	3.2	0.3	Fine on 3, Cloudy 4, Overcast 7, and Rain on 17 days. Th on 5 days. N and T on a few days. Shocks of Earthquake on 27th.
June	E 6.2	ESE 10.9	E 6.2	1.0	3.3	0.2	5.7	1.3	0.0	Cloudy on 4, Overcast 10. Rain on 16 days. Th, T and fair on many days.
July	E by S 8.0	S 11.1	E 6.8	1.5	2.3	0.2	4.8	1.9	1	Fine 3, Cloudy 7, Overcast 13; Rain on 8 days, Th on 3 days. L and Th on many days.
August	E 7.0	S 10.0	E 5.6	1.2	3.5	0.0	5.6	3.4	0.0	Fine 1, Cloudy 3, Overcast 8, Rain on 19 days. Th on 12 days; T or Th on many days. Shocks of Earthquake on 3rd.
September	E by S 8.4	S by E 9.8	ENE 6.8	0.7	2.3	0.3	6.1	3.7	0.3	Fine 3, Cloudy 3, Overcast 9 and Rain on 15 days. Th T or fair on many days.
October	ESE 8.4	SE 12.2	E by N 7.6	0.8	2.6	1.2	5.0	3.2	0.7	Cloudy 9, Overcast 10, Rain on 12 days. Th T or L on a few days. Shocks of Earthquake on 14th.
November	E 6.9	NE by N 10.3	NE 9.6	1.5	2.3	1.0	3.5	2.1	0.9	Fine 5, Cloudy 7, Overcast 6, Rain on 12 days. Th T and rain a few days. Norther on 20th.
December	E 8.3	ENE 10.8	ENE 8.1	1.3	0.8	0.6	5.1	0.3	0.3	Fine 6, Cloudy 9, Overcast 7, Rain on 9 days. Shock of Earthquake on 21th.
Mean	E 7.9	SE 11.7	ENE 7.9	1.6	2.5	0.6	4.7	1.9	0.3	150 Rainy days in the year.

No. 439.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF
FEBRUARY, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extremes Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.977	29.937	76.9	78.5	81.2	72.5	8.7	84.0	3	65.5	9	18.5
Kingston	24	29.953	29.901	69.5	82.0	88.0	68.4	17.6	88.5	4	65.1	12	23.4
Negril Point Light House	33	29.964	29.919	72.0	80.6	82.6	69.3	13.3	81.8	4	66.8	9	18.0
Castleton Gardens	496	..	..	65.9	78.7	83.1	..	..	88	3	..	..	..
Hope Gardens†	668	29.973	29.889	67.7	80.6	84.9	64.9	20.0	89	26	62	14	27
Stony Hill Indus. School	1,400	..	..	67.6	76.4	80.1	63.8	16.3	86	16	61	9*	25
Hill Gardens	4,900	25.284	25.234	59.1	62.0	65.3	52.4	12.9	69	2*	50	16	19

STATIONS.	Elevation.	Dew Point and Humidity.		Rainfall.	Wind per diem.	Wind: direction from and miles per hour.		Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
Morant Pt. Light House	8	70.5	80	71.1	78	4.39	359	N.E.	19	N.E.	19	3.8	0.5
Kingston	24	64.5	84	69.2	65	0.83	180	N.	5	S.E.	12	0.4	0.9
Negril Point Light House†	33	65.1	79	67.9	68	5.62	267	E.	11	N.	12	1.8	0.4
Castleton Gardens	496	63.0	90	69.2	72	6.94	..	..	..	..	..	..	..
Hope Gardens	668	61.6	71	68.0	65	1.08	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	63.9	88	72.0	86	2.89	..	..	..	..	..	..	..
Hill Gardens	4,900	55.3	87	59.0	90	6.77	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House. Wind 11 p.m.

N.E. 11.2

Phumb Point Light House { Average No. of Miles of wind per diem 195
Greatest on the 31st 486
Least on the 5th 98

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

		FEBRUARY, 1915.				
		Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
			Amount.	Date.		
		In.	In.			In.
NORTH-EASTERN DIVISION.						
Manchioneal	...	9.82	3.49	9	11	6.10
Ecclesdown	...	10.47	1.52	19	12	...
Spring Valley, Portland	...	9.14	3.46	9	13	...
Bath	...	4.63	1.18	16	18	4.86
Boston	...	8.25	2.45	9	10	6.14
Moore Town	...	11.27	...	...	...	14.18
Port Antonio	...	10.87	4.64	9	10	6.10
Fellowship	...	11.38	3.14	9	18	11.70
Windsor, Portland	...	...	...	...	...	...
Johnson River Bridge	...	1.30	0.32	16	17	2.24
Shrewsbury	...	14.65	4.58	9	13	10.22
Cedar Valley, St. Thos.	...	1.70	0.40	16	7	2.76
Hope Bay	...	...	...	...	...	...
Moy Hall, St. Thos.	...	3.26	1.35	7	9	2.45
Brooklodge	...	1.63	0.70	8	11	...
Lennox	...	13.85	3.00	19	16	...
Farm Hill	...	4.35	1.50	9	6	3.25
Hill Gardens	...	6.77	...	...	...	4.05
Buff Bay	...	7.93	1.94	19	13	7.74
Vinery	...	8.78	1.65	9	14	...
Windsor Castle, Port.	...	4.68	0.77	5	12	...
Greenvale, Portland	...	9.93	3.10	9	17	...
Mt. Holstein	...	9.27	2.22	9	16	7.46
Irish Town	...	...	...	...	...	...
Rose Hill	...	2.46	1.00	8	4	...
Hardware Gap	...	...	...	...	...	...
Stony Hill Ind. School	...	2.89	1.74	3	9	2.22
Castleton Gardens	...	6.94	...	...	...	4.95
Lawrence Tavern	...	1.58	0.40	6	8	2.36
Cedar Valley, Red Hills	...	2.99	0.82	1	9	...
Carew Castle	...	4.50	1.71	5	7	1.84
Agualta Vale	...	3.62	0.83	4	11	...
Water Valley	...	3.37	0.76	4	11	5.73
Albany, Ry. Station	...	5.68	0.90	19	14	...
Plantfield	...	2.92	0.94	17	7	...
Richmond, St. Mary	...	4.81	0.98	5	12	5.31
Hampstead, St. Mary	...	7.15	1.81	6	18	...
Troja	...	...	...	...	...	...
Lucky Hill	...	4.67	1.00	7	12	...
Rio Hoe	...	3.41	1.37	5	11	4.05
Unity Valley	...	3.46	1.20	7	11	3.60
Moneague	...	4.42	1.45	7	9	4.08
Claremont	...	5.72	1.47	5	6	4.58
Albion, St. Ann	...	4.25	0.84	7	12	3.59
Averham Park	...	9.08	3.41	7	7	4.50
Means		6.15				
CENTRAL SUB-DIVISION.						
Headworks, Rio Cobre	...	1.68	0.42	25	6	1.63
Linstead	...	1.98	0.80	4	7	1.96
Berkshire Hall	...	1.98	0.94	7	10	2.09
Point Hill	...	3.26	1.40	6	10	3.85
Marlie Hill	...	2.61	0.60	5	7	...
Worthy Park	...	1.28	0.41	5	5	2.05
Croft Hill	...	1.21	0.60	7	3	...
Chapelton	...	1.90	0.64	17	9	1.80
Danks Works	...	1.28	0.48	16	4	1.85
Savoy House	...	1.58	0.46	16	8	1.74
Crooked River	...	...	...	...	...	...
Trout Hall	...	0.57	0.30	23	5	...
Cave Valley	...	...	...	...	...	...
Greenock	...	...	...	...	...	...
Means		3.21				

WEST-CENTRAL DIVISION.						SOUTHERN DIVISION.					
FEBRUARY, 1915.						FEBRUARY, 1915.					
Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	
	Amount.	Date.					Amount.	Date.			
In.	In.			In.		In.	In.			In.	
Whitney	3.19	0.90	7	7	2.84	Morant Point L. H.	4.39	1.36	9	14	2.74
Mocho, Clarendon	2.20	0.80	17	5	...	Elliott Hill	4.43	0.76	11	18	...
Baillieston	2.75	1.62	7	6	2.99	Pleasant Hill	3.87	0.66	10	17	...
Brokenhurst	1.75	0.60	7	5	...	East Prospect	2.44	1.37	16	11	...
Christiana	2.07	0.61	8	4	2.75	Morant Bay	0.94	0.60	16	9	2.03
Chudleigh	1.61	0.54	24	6	...	Easington	1.88	1.58	8	2	1.52
Shooter's Hill	2.14	1.17	7	9	...	Bull Bay	2.35	1.25	3	2	0.53
Spitzbergen	2.06	1.07	7	5	...	Bellevue	...	...	...	...	...
Kendal, Manchester	2.25	1.65	7	3	2.59	Gordon Town	...	...	...	...	...
Marshall's Pen	4.46	2.48	24	5	3.90	Hope Gardens	1.08	...	...	...	1.19
Mandeville	1.37	0.72	7	5	2.87	King's House Gardens	0.99	...	...	...	...
Carlton, Mandeville	1.43	0.56	7	7	2.62	Halfway Tree	0.57	0.42	8	2	0.88
The Hill	...	...	...	...	...	Lunatic Asylum	1.27	0.82	8	5	0.54
Fairfield, Manchester	2.72	1.70	7	8	3.11	Parade Gardens	...	...	...	...	...
Ulster Spring	4.90	1.50	8	7	2.76	Upper Elletson Road	1.34	0.77	8	3	...
Freeman's Hall	2.30	1.30	8	4	...	Kingston P. W. Office	0.83	0.52	8	3	0.67
Albert Town	2.38	1.00	8	5	...	Plumb Point L. H.	0.77	0.57	8	3	0.72
Lowe River	4.28	2.25	3	5	2.52	Clifton Pen	0.55	0.35	8	2	...
Troy	4.05	1.20	3	6	2.86	Quarantine Station	0.36	0.24	8	2	...
Windsor Pen, Trel.	4.68	1.86	9	9	2.36	Spanish Town	1.44	0.93	17	5	1.34
Medina	3.98	1.46	25	5	...	Hog Hole, St. Catherine	2.79	1.40	25	5	1.82
Wallingford	2.48	0.65	1	9	...	Hartlands	2.99	1.12	6	4	1.23
Balaclava Police Station	1.48	0.57	3	5	2.29	Belmont, Guanaboa Vale	3.91	2.88	6	10	...
Siloah	6.57	1.55	4	9	2.37	Old Harbour	2.50	1.88	6	4	1.81
Appleton Estate	...	...	...	...	...	May Pen	1.35	0.46	16	8	1.76
Maggotty	4.68	1.50	4	8	2.70	Hillside	...	...	...	...	...
Butlers	5.71	2.07	3	8	...	Moreland	...	...	...	...	...
Dromilly Pen	4.49	1.80	8	5	...	Dunkley's, Vere	1.14	0.60	6	5	1.17
Spring Vale	2.55	1.45	8	2	2.34	Dry River	1.32	0.59	6	5	...
Garland	...	...	...	...	...	Denbigh	0.60	0.40	15	2	1.40
Mocho, Catadupa	6.78	1.15	7	11	...	Toll Gate	2.18	0.94	16	6	...
Springfield, St. Elizabeth	7.42	2.43	3	9	...	Woodleigh	0.50	0.50	15	1	...
Chesterfield, St. James	11.23	5.20	4	6	...	New Yarmouth	0.94	0.47	6	3	1.02
Catadupa Rly. Station	5.44	1.03	4	9	...	Exeter, Vere	1.30	0.64	8	7	0.97
Kempshot	2.95	1.68	7	7	3.00	Rhymesbury	1.51	0.44	19	7	1.37
Cambridge, St. James	3.35	0.95	8	9	...	Milk River	1.20	0.50	6	4	1.64
Ducketts	7.56	2.50	4	9	...	Clarendon Pk. Ry. St.	1.91	0.85	16	6	...
New Market, Police St.	3.79	1.40	5	4	...	Victoria Town	2.42	1.31	7	4	1.91
The Bog, New Market	3.12	2.00	3	5	...	Hog Hole, S. Manch.	4.41	1.03	4	8	...
Kew Park	8.05	4.11	4	10	2.72	Stone's Hope	3.08	1.55	4	7	2.22
Knockalva	5.96	2.54	4	8	...	Newport, Manchester	1.58	0.31	6	8	2.94
Ramble	5.14	1.50	4	9	...	Great Valley, Man.	1.62	0.60	7	7	2.48
Petersville	2.49	0.69	9	7	2.91	Alligator Pond	1.11	0.72	7	2	1.20
Darliston	4.30	1.70	3	5	3.63	Southfield, St. Elizabeth	1.22	0.46	8	5	...
Bluefields	3.75	1.16	8	6	4.35	Lititz	1.64	0.68	8	5	...
Whithorn	4.52	1.30	3	7	3.40	Long Hill	...	...	...	...	...
Water Works Pen	3.50	1.40	4	7	...	Torrington	...	...	...	...	...
Great Valley, Han.	5.30	1.75	2	6	3.18	Bethlehem, St. Eliz.	3.13	1.35	25	6	2.55
Prospect Park	...	...	...	...	...	Santa Cruz	2.41	1.21	7	6	2.48
Blackheath	...	...	...	...	...	Pedro Plains Police St.	1.06	0.37	25	4	1.43
Fontabelle, Westm.	2.30	1.19	4	7	2.62	Mountainside	...	...	...	...	...
Belleisle	2.04	1.07	3	4	...	Black River	0.87	0.42	8	5	1.78
Morgan's Bridge	2.06	0.90	8	6	2.43	Font Hill	2.60	2.15	25	3	1.38
King's Vale Police St.	5.20	2.70	8	6	2.73	Mount Edgecombe	2.95	1.81	3	6	2.48
Means	4.08	...	...	...	...	Sweet River	2.50	0.50	11	6	2.32
						Windsor, Sav.-la-mar	5.18	2.64	2	6	2.34
						Orchard	3.87	1.71	3	7	...
						Sav.-la-mar	5.14	1.64	5	5	2.00
						Meylersfield	...	...	...	...	...
						Retreat	3.81	2.03	5	4	2.36
						White Hall	...	...	...	...	...
						Negril Point L.H.	5.62	1.86	5	8	1.34
						Means	2.16	...	...	...	...

NOTES.				SHOCKS OF EARTHQUAKE IN FEBRUARY, 1915.			
COMPARATIVE TABLE OF RAINFALL.							
(Based upon the "Average" Stations only.)							
	FEBRUARY.			Date.	Standard Time (Approx.)		Notes: where felt, etc.
	1915.	Average.					
	In.	In.			hr.	min.	
North-Eastern Division	...	6.15	5.29	11	5	30 a.m.	Yallahs.
Northern "	...	3.21	2.55	17	3	0 p.m.	Lititz.
West-Central "	...	4.08	2.76				
Southern "	...	2.16	1.67				
The Island	...	3.90	3.07				
The rainfall was fairly uniformly distributed over the Island; the heaviest fall was 14.65 at Shrewsbury in Portland; and the smallest 0.36 was at the Quarantine Station near Kingston.							

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

METEOROLOGICAL OBSERVATIONS. MORANT POINT LIGHT-HOUSE, JAMAICA. MEAN RESULTS FOR THE YEAR 1914.

Month.	Bar. Pressure.		Temperature.						Extremes for the month.		Dewpoint and humidity.		Rain-fall.	Wind from and miles per hour.			Clouds : In tenths.						REMARKS.					
	7 a.m.		3 p.m.		Max.		Min.		Range.		7 a.m.			3 p.m.		Miles of wind per diem.	7 a.m.	3 p.m.	11 p.m.	Lower.		Middle.		Upper.				
	Ins.	Th.	Ins.	Th.	Ins.	Th.	Ins.	Th.	Ins.	Th.	Ins.	Th.		Ins.	Th.					Ins.	Th.	Ins.		Th.	Ins.	Th.	Ins.	Th.
Jan.	29.997	29.963	76.179	68.177	5.10	288.060	0.28	070.583	72.277	2.52	Ins.	ENE	15	NE b N	14	ENE	15	Mis	7	3	7	3	7	3	Fine and dry, two northers during month, 15th-16th and 27th.			
Feb.	30.021	29.977	77.177	69.381	6.72	7	8.987	0.65	022.072	385.72	7.80	0.69	ENE	18	ENE	14	...	...	...	1.5	2.4	3	4	3.9	6 N W gale on 21st-22nd. Fine and dry.			
March	30.004	29.965	76.575	69.281	7.18	9.435	0.83	022.075	497.78	2.30	326	ENE	16	NE b E	14	...	...	...	2.4	2.7	3	2	3.5	9	Norther on 2nd. NE gale on 10th-11th.			
April	29.941	29.846	78.678	69.983	3.73	8	9.586	0.66	020.073	683.74	0.79	2.48	ENE	15	E b N	11	...	...	...	2.5	2.2	2.1	2.4	2.2	2.4	Dry.		
May	29.980	29.942	80.580	69.582	5.84	8.76	1	8.786	0.67	019.075	785.76	4.82	1.14	E b N	19	ENE	16	...	...	...	2.6	2.1	1.7	8	3.0	1.9	Dry.	
June	29.982	29.953	81.281	69.985	0.77	9	7.186	0.74	012.077	988.77	6.84	3.48	E b N	18	E b N	17	...	...	...	2.5	2.3	1.0	1.3	2.3	2.4	E gale on 7th.		
July	30.004	29.977	82.181	69.884	1.85	9.78	8	7.187	0.75	012.076	884.78	1.82	1.09	E b N	21	E b N	19	...	...	...	3.2	1.8	5	1.3	2.0	1.2		
Aug.	29.980	29.952	83.082	69.886	8.79	7	7.188	0.76	012.077	887.78	4.81	0.43	E b N	17	E b N	16	...	...	...	3.2	1.5	1.3	1.5	2.2	1.4	Earthquake on 3rd, sheet lightning nearly every night.		
Sept.	29.938	29.901	82.882	69.885	186	8.79	1	7.788	0.71	5.16	5.74	6.78	74.072	1.91	295	ENE	16	E b N	13	...	...	2.2	2.0	1.7	1.3	2.6	1.9	Distant lightning at night in NE and E.
Oct.	29.931	29.871	81.280	69.434	0.86	2.76	6	9.688	5.71	0.17	5.74	5.82	74.673	2.76	216	NE b E	10	E	9	...	...	3.3	1.5	3.3	7	1.8	Distant lightning at night in NE and E.	
Nov.	29.949	29.864	81.878	69.382	0.84	2.73	9	10.387	0.68	0.19	0.74	9.87	75.881	17.13	274	NE b N	16	NNE	14	...	...	3.9	1.0	1.0	3.8	2.0	1.0	Flood rains on 13th, 12 inches falling in about 8 hours. Norther on 21st and 22nd.
Dec.	29.958	29.910	79.880	69.178	3.97	5.5	8.436	0.70	0.16	0.74	3.82	74.579	5.47	310	NE	17	ENE	15	...	...	3.3	1.3	3	3.1	1.1	6	Rain squalls chief feature of this month.	
Total	...	...	...	...	...	...	...	...	...	...	...	41.40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	Whole year dry until middle of November and December.
Means	29.971	29.927	80.179	69.682	2.84	3.75	6	8.786	0.68	9.18	0.74	8.85	75.881	...	304	NE b E	17	ENE	14	...	...	2.8	1.8	1.0	1.8	2.3	1.5	

M. H.

No. 440.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF

MARCH, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.949	29.908	76.1	80.4	82.8	70.6	12.1	86.5	19	64.0	15	22.5
Kingston	24	29.934	29.885	72.5	84.4	87.4	70.5	16.9	89.7	26	67.3	10*	22.4
Negril Point Light House	33	29.943	29.898	73.7	81.3	83.4	70.2	13.2	86.3	30	65.2	12	21.1
Castleton Gardens	496	..	..	61.0	84.0	88.0	..	..	91	16*	..	..	..
Hope Gardens†	668	29.947	29.852	69.3	84.5	87.4	66.3	21.1	92	30	61	9	31
Stony Hill Indus. School	1,400	..	..	67.7	79.6	83.1	64.1	19.0	88	30	62	10*	26
Hill Gardens	4,900	25.277	25.233	61.6	64.5	68.7	57.3	11.4	74	31	57	20*	17

STATIONS.	Eleva- tion.	Dew Point and Hu- midity.					Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.		3 p.m.					7 a.m.		3 p.m.		7 a.m.			3 p.m.		
	ft.	°	°	°	°	in.	miles	Var.	m.	E.N.E.	m.	L.	M.	U.	L.	M.	U.	
Morant Pt. Light House ..	8	71.4	86	72.5	77	1.93	249		13		15	2.7	1.0	1.3	2.9	1.2	1.0	
Kingston ..	24	66.8	82	71.5	65	0.58	183	NNE.	5	S.E.	13	1.2	0.8	1.7	2.5	2.6	0.4	
Negril Point Light House† ..	33	67.3	80	69.7	63	1.63	239	E.	8	NNE.	13	2.9	1.7	1.8	3.5	1.8	0.2	
Castleton Gardens ..	496	64.1	93	70.0	63	2.80	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens ..	668	62.4	78	71.1	63	0.41	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School ..	1,400	63.4	86	68.7	69	1.32	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens ..	4,900	55.6	81	55.0	70	1.24	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House. Wind 14 p.m. N.E. 10.1

Plumb Point Light House { Average No. of Miles of wind per diem 235
 Greatest on the 24th 502
 Least on the 16th 123

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

MARCH, 1915.					
NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Manchioneal	1.76	0.72	26	4	3.26
Spring Valley, Portland	2.18	0.78	26	5	
Bath	0.97	0.30	8	8	4.57
Boston	3.35	0.95	23	7	5.10
Moore Town	4.07	1.00	29	8	10.97
Port Antonio	9.95	3.34	29	6	4.90
Fellowship	5.59	2.03	29	8	8.09
Windsor, Portland					
Johnson River Bridge	0.99	0.46	27	7	2.59
Shrewsbury	3.92	1.52	29	4	11.03
Cedar Valley, St. Thos.	1.65	0.75	27	4	3.30
Hope Bay	7.00	4.95	29	8	
Moy Hall, St. Thos.	1.40	0.50	28	5	3.01
Brooklodge	0.75	0.27	28	5	
Lennox	11.90	7.00	29	7	
Farm Hill	0.55	0.30	28	2	5.01
Hill Gardens	1.24				5.19
Buff Bay	9.68	6.50	29	7	5.79
Vinery	11.63	6.88	29	9	
Windsor Castle, Port.	7.74	3.90	29	6	
Greenvale, Portland	2.21	1.00	24	9	
Mt. Holstein	0.88	0.37	23	9	9.53
Irish Town	0.00				
Rose Hill	0.00				
Hardware Gap	1.00				4.50
Stony Hill Ind. School	1.32	1.02	23	2	2.99
Castleton Gardens	2.80				4.93
Lawrence Tavern	0.00				2.69
Cedar Valley, Red Hills					
Carew Castle	0.36	0.14	23	4	3.92
Agualta Vale	5.95	4.40	29	5	
Water Valley	6.39	3.75	29	7	5.69
Albany, Ry. Station	5.25	2.72	29	6	
Platfield	1.13	0.78	23	3	
Richmond, St. Mary	2.87	2.64	29	3	3.75
Hampstead, St. Mary	3.84	1.88	29	11	
Troja					
Lucky Hill	5.36	3.30	29	7	
Rio Hoe	3.17	0.95	21	7	3.64
Unity Valley	2.98	0.93	21	7	3.64
Moneague	3.34	1.65	21	6	3.03
Claremont	0.81	0.33	27	3	3.43
Albion, St. Ann	1.33	0.40	29	7	3.61
Averham Park	1.51	0.48	20	5	3.81
Means	2.80				

MARCH, 1915.					
NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Bryan Castle	8.42	4.50	27	5	1.88
Braco	7.25	4.50	27	4	1.62
Arcadia	7.16	3.80	27	5	1.84
Lancaster	9.07	4.25	27	6	1.92
Harmony Hall	8.54	5.25	27	8	1.74
Vale Royal	7.16	2.19	8	7	2.28
Colchis Pen	2.22	0.92	23	4	2.02
Swanswick	3.92	2.15	27	5	
Georgia					
Long Pond					
Hyde Hall	4.83	3.70	27	6	
Steelfield					
Etingdon	3.03	1.50	27	4	1.77
Lottery	6.80	5.70	27	4	2.00
Falmouth	2.62	1.86	27	5	1.76
Florence Hall	3.76	3.00	27	2	
Good Hope	5.05	4.20	27	3	
Unity	5.64	3.71	27	6	
Kent					
Gales Valley					
Canaan	5.95	3.62	27	5	2.23
Content					
Bellfield	4.22	2.67	27	4	
Guilsbro	7.55	3.30	27	10	1.77
Moor Park	4.90	3.00	27	7	1.88
Rose Hall					
Running Gut					
Cinnamon Hill					
Success					
Montego Bay	3.67	2.50	27	7	1.58
Catherine Hall	3.47	2.45	27	7	1.84
Retirement	5.45	3.71	27	9	
King Gate	4.50	3.89	27	5	3.18
Round Hill					
Blue Hole	5.56	4.58	27	4	
Haughton Court	2.15	2.05	27	4	
Lucea	4.04	2.90	27	5	2.33
Green Island, Police St.	1.62	0.80	27	6	
Means	5.18				

WEST-CENTRAL DIVISION.	MARCH, 1915.					SOUTHERN DIVISION.	MARCH, 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
	In.	In.			In.		In.				In.
Whitney	...	...	...	...	...	Morant Point L. H.	1.93	0.70	29	7	In.
Mocho, Clarendon	1.10	0.90	27	2	...	Elliott Hill	0.88	0.37	27	6	2.11
Baillieston	3.32	1.50	27	9	4.64	Pleasant Hill	0.92	0.34	26	6	...
Brokenhurst	3.20	2.80	27	3	2.70	East Prospect	0.70	0.52	25	3	...
Christiana	2.78	0.59	27	8	4.06	Morant Bay	0.50	0.26	8	3	...
Chudleigh	3.66	1.41	21	9	...	Easington	0.00	...	...	...	1.79
Shooter's Hill	2.68	1.69	27	7	...	Bull Bay	0.00	...	...	...	2.94
Spitzbergen	3.64	1.38	21	7	...	Gordon Town	0.00	...	...	...	0.34
Kendal, Manchester	4.03	2.65	27	5	3.44	Hope Gardens	0.41	...	...	...	1.54
Marshall's Pen	4.79	1.45	27	6	3.85	King's House Gardens	0.72	...	...	...	1.90
Mandeville	3.25	2.02	27	6	4.28	Halfway Tree	0.79	0.51	26	2	1.26
Carlton, Mandeville	3.77	2.88	27	7	...	Lunatic Asylum	0.41	0.21	17	4	1.06
The Hill	2.06	1.18	27	6	...	Upper Elletson Road	0.59	0.25	17	4	0.97
Fairfield, Manchester	2.68	0.88	27	6	3.84	Kingston P. W. Office	0.58	0.28	17	5	...
Ulster Spring	5.35	1.30	19	7	3.40	Plumb Point L. H.	0.52	0.26	27	4	1.05
Freeman's Hall	3.57	1.15	21	6	...	Clifton Pen	0.55	0.30	8	3	0.91
Albert Town	2.64	0.78	23	8	...	Quarantine Station	0.73	0.30	28	5	...
Lowe River	9.80	3.25	24	7	5.54	Spanish Town	0.42	0.19	19	4	...
Troy	1.25	0.95	20	2	6.17	Hog Hole, St. Catherine	0.50	0.24	19	3	2.10
Windsor Pen, Trel.	4.23	2.25	27	6	3.07	Hartlands	0.81	0.48	8	3	2.12
Medina	4.22	1.50	21	8	...	Belmont, Guanaboa Vale	0.86	0.26	26	6	1.75
Wallingford	3.58	0.91	27	7	...	Old Harbour	2.00	0.90	8	4	...
Balaclava Police Station	3.40	1.25	23	8	4.74	May Pen	1.29	1.00	27	4	2.20
Siloah	1.15	0.70	27	3	5.68	Hillside	...	...	...	...	2.01
Appleton Estate	...	...	...	...	...	Moresland	...	...	...	...	...
Maggotty	2.90	1.40	27	4	5.80	Dunkley's, Vere	1.55	0.90	17	5	...
Butlers	...	...	...	...	...	Dry River	1.58	0.90	27	5	1.49
Dromilly Pen	5.34	3.70	27	3	...	Denbigh	1.20	0.90	27	2	...
Spring Vale	5.35	3.00	27	6	2.92	Toil Gate	2.08	1.84	27	3	2.06
Garland	...	...	...	...	...	Woodleigh	1.14	0.84	27	2	...
Mocho, Catadupa	1.56	0.85	21	4	...	New Yarmouth	1.25	0.86	27	3	...
Springfield, St. Elizabeth	2.09	1.50	27	4	...	Exeter, Vere	0.84	0.62	27	2	1.26
Chesterfield, St. James	...	...	...	...	...	Rhynsbury	3.70	1.27	27	12	...
Catadupa Rly. Station	2.66	1.20	27	4	...	Milk River	1.66	1.06	27	3	2.11
Kempshot	7.62	3.92	27	8	3.00	Clarendon Pk. Ry. St.	...	...	...	...	1.66
Cambridge, St. James	4.99	2.70	27	5	...	Victoria Town	2.18	1.85	27	2	...
Ducketts	...	...	...	...	...	Hog Hole, S. Manch.	3.94	3.00	27	4	2.14
New Market, Police St.	2.65	1.20	27	4	...	Stone's Hope	2.89	2.38	27	2	...
The Bog, New Market	2.71	1.65	27	4	...	Newport, Manchester	2.20	1.73	27	5	2.64
Kew Park	3.48	2.63	27	4	4.10	Great Valley, Man.	3.83	3.00	27	4	3.03
Knockalva	3.14	2.58	27	6	...	Alligator Pond	4.05	2.93	27	3	2.23
Ramble	4.21	...	...	4	...	Southfield, St. Elizabeth	3.04	2.03	27	6	1.73
Petersville	1.85	1.30	27	3	5.18	Lititz	1.79	1.25	27	4	...
Darliston	1.76	1.44	27	4	6.54	Long Hill	...	...	...	...	...
Bluefields	1.97	0.70	27	4	9.07	Torrington	1.55	1.35	27	2	3.47
Whithorn	2.45	1.50	27	5	5.87	Bethlehem, St. Eliz.	2.02	0.90	27	6	4.25
Water Works Pen	2.32	1.75	27	4	...	Santa Cruz	1.85	0.66	18	3	4.26
Great Valley, Han.	...	...	...	...	...	Pedro Plains Police St.	1.89	1.36	27	5	...
Prospect Park	...	...	...	...	...	Mountainside	...	...	...	...	...
Blackheath	1.72	0.62	...	3	...	Black River	0.85	0.70	27	5	2.59
Fontabelle, Westm.	2.62	1.06	27	3	3.94	Font Hill	2.15	1.75	27	4	4.09
Belleisle	2.52	1.30	27	3	3.38	Mount Edgecombe	1.54	1.50	27	3	4.10
Morgan's Bridge	2.81	1.39	27	5	4.75	Sweet River	1.62	0.97	27	3	3.54
King's Vale Police St.	...	...	...	...	...	Windsor, Sav.-la-mar	1.43	0.65	27	4	2.90
Means	3.50	...	...	...	...	Orchard	1.15	0.60	27	4	...
						Sav.-la-mar	1.50	0.70	27	5	2.63
						Meylersfield	1.43	1.18	27	2	...
						Little London	0.80	0.37	27	3	...
						Retreat	1.93	0.73	27	3	3.28
						White Hall	...	...	...	...	...
						Negril Point L.H	1.63	1.01	27	4	2.34
						Means	1.45	...	...	...	...

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

	MARCH.	
	1915.	Average.
	In.	In.
North-Eastern Division	2.80	4.61
Northern	5.18	2.36
West-Central	3.50	4.18
Southern	1.45	2.22
The Island	3.23	3.34

The heaviest rainfall 11.90 inches was recorded at Lennox, in the north-eastern division, many places in the southern division had no rain.

The heavy rainfall in the northern division was chiefly due to a "norther" on the 27th. Most places on the north-side recorded over 4 inches of rain while farther inland and on the south side of the island very little rain fell.

SHOCKS OF EARTHQUAKE IN MARCH, 1915.

Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, etc.
	hr. min.		
4	During night.	I.	Mt. Holstein: N. & S. 0.006
10	Midnight.	I.	do. Two shocks: NE. & SW. 0.005 and NW. & SE. 0.003
31	1 a.m.		do. NE. & SW. 8.009 preceded by a long rumble.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

THE JAMAICA RAINFALL AND ITS PERIOD OF FIVE AND A HALF YEARS.

In the year 1880 several rainfall registers had been reduced, and it was then found that there were four divisions in the Island showing certain natural characteristics,* which had been noticed two hundred year previously.

There were in 1880 comparatively few registers to deal with, and the rainfall for each year was compiled from all the current registers available; this work was carried back to 1870, when there were very few registers indeed, and on to 1899 when the Weather Service was disestablished. When the service was recommenced in 1907 it was found necessary to take the annual rainfall from 1900 onwards from the monthly results published in the Weather Reports which had been continued during that interval: these monthly results are based on only the "average stations," where registers have been kept for many years; and this method has been continued to the present time.

This break in the method of computing the annual rainfall has had probably but small effect, the general principle being that no matter how the stations were changed among the old established properties in any division, the registers would still give the average rainfall in that division; and then the mean of the four divisions would give the rainfall for the Island.

But it so happens that there has been a considerable change in agriculture; and besides the old established properties, plantations for the cultivation of bananas have been developed in districts where there is a larger rainfall, which has of course been registered; and the Public Works Department has kept gauges in the more central districts and in certain places where the rainfall is exceptionally heavy. And as many of these stations have been so long continued as to become "average stations," it follows that the recorded Island rainfall must have a tendency to rise.

In consequence therefore of all these changes it seems advisable to make a strict investigation into the Island rainfall based on those places where the registration has been complete and continuous from January 1870 to December 1914, that is to say for the past 45 years.

There are as many as seven places where perfect registers have been kept for this long period, namely,

Albion, in the middle of the parish of St. Ann.
 Drax Hall, near St. Ann's Bay.
 Braco, in the parish of Trelawny.
 Harmony Hall do.
 Vale Royal do.
 Lottery do.
 Windsor, near Savanna-la-Mar

We are greatly indebted to the owners of properties and managers of estates, who have kept these valuable records; they have been of great service up to the present time, and they will increase in value as time goes on.

But it will be seen that these places represent only four small localities, and we require a more general representation of the Island; it therefore becomes necessary to consider the registers at other places, and to supply any missing details in these registers when this can be done without fear of any sensible error in the final result.

A number of rain gauges were formerly distributed by the Public Works Department so that registration should commence in January 1870; but at the Plumb Point and Morant Point Light-houses registration did not commence until April and May that year; at the Cinchona Plantation, now called the Hill Gardens, registration did not commence until January 1871; and at Kingston, while registration was continued from January 1 to December 31, 1870, it was discontinued during the following year, and recommenced in January 1872. In this case there is reason to suppose that the gauge was moved from Kingston to Halfway Tree, where a perfect record was kept from January to December 1871, when it suddenly stopped, and was not recommenced until 20 years later.

These four stations are very important; not only have the registers been carefully kept for 44 or 45 years, but they are likely to be long continued in the future. With regard to the two Light-houses, as the rainfall was quite normal in 1870 until May when heavy rains fell, we can supply the missing months by means of their averages without fear of any sensible error. With regard to Kingston, in 1871 the rainfall at Halfway Tree was 32.52, and at Plumb Point it was 18.41; so that Kingston must have been between the two, and if we take the mean, 25.46, we may be wrong by 2 or 3 inches. With regard to the Cinchona Plantation and the 1870 rainfall, a register was kept for some years at the Military station at Newcastle, not far from the plantation and at much the same elevation; and as the rainfall at Newcastle was 139.64 for that year, by adopting this amount for the Plantation we shall no doubt be liable to an error of several inches, but proportionally, probably not more so than in the case of Kingston during the following year.

With regard to three other estates in Trelawny, Brampton Bryan and Bryan Castle, both commenced in April 1870, their registers are perfect since that time, and they can be treated in the same way as the Light-houses. And as for Lancaster it was only a blank in the register for May 1906 which kept it out of the first list; the place is close to Harmony Hall, and the missing detail can be at once supplied.

But unfortunately there is no place in the West-central division where a continuous or nearly continuous register has been kept from 1870 onwards; a register was indeed kept at Mandeville from 1870 to 1879, then it was discontinued, and it was not recommenced until 1892. It was said that the rainfall in the West-central districts was abundant and regular so that there was no need of registration. However, Cave Valley, almost in the middle of the Island, has a perfectly continuous register since January 1871; and although it can hardly be said to represent the West-central division, an effort must be made to include it as representing an important locality near the east end of that division. The Chapelton rainfall for October 1870 is clearly wrong; 10 inches have to be added; this makes the total for that year 71.78 and not 61.78 as stated in W. R. No. 33; and at Albion it was 84.60; and by taking the

* See an article in the *Handbook of Jamaica*, 1881, p. 92, by the present writer.

† With references to this article only: the registers of course remain unaltered.

mean 78.19 as the rainfall at Cave Valley for 1870 we are liable to the same proportionate error as for Kingston and the Cinchona Plantation.

By means of these 15 registers we can make a systematic and detailed inquiry into the rainfall during any interval of time during the past 45 years; but we have first to consider the period of five and a half years marked by droughts more or less partial, and more or less severe.

In the following list of droughts the first lasted from October 1768 to May 1770, and is said by Long in his *History of Jamaica* to have been the severest ever remembered in the Island; the fifth is taken from our early records; and the details of the rest will be found among the monthly Weather Reports, No. 33 being retrospective.

DROUGHTS IN JAMAICA.

Year.	Intervals.	No. of periods.
	yrs.	
1769	17	3
1786	54	10
1840	5	1
1845	24	4
1869	3	1
1872	8	1
1880	5	1
1885	5	1
1890	6	1
1896	7	1
1903	4	1
1907	7	1
1914		

There have thus been 26 periods in the 145 years, which gives an average period of 5.6 years, or a little more than five and a half years. These droughts all follow a Solar maximum or minimum by about two years, and the details were given by me in *The Rainfall of Jamaica*, published in 1911 by the Government of Jamaica; and most of the irregularities in the above list are due to the Solar cycle itself.

We have now to search for any moderately long period which may exist; and to do this we shall group the years together in fives; that is to say, in each register we shall tabulate the average annual rainfall for five years, from 1870 to 1874 inclusive, 1875 to 1879 inclusive, and so on; and it is to be expected that this process will remove or greatly reduce any error introduced by completing the imperfect registers as described above:—

I. Rainfall at each place for each group of five years.

No.	Place.	1	2	3	4	5	6	7	8	9
		1870 to 1874.	1875 to 1879.	1880 to 1884.	1885 to 1889.	1890 to 1894.	1895 to 1899.	1900 to 1904.	1905 to 1909.	1910 to 1914.
		in.	in.	in.	in.	in.	in.	in.	in.	in.
1	Hill Gardens	104.38	142.50	78.57	107.97	105.30	111.77	99.85	108.33	89.42
2	Afbion.	78.00	78.40	63.75	87.69	83.11	76.70	81.18	74.09	72.90
3	Drax Hall	67.91	66.40	60.32	73.79	68.80	55.60	76.85	61.74	52.31
4	Brampton Bryan	55.02	50.98	34.57	41.24	39.41	41.02	55.07	47.57	46.06
5	Bryan Castle	51.49	49.44	29.75	41.04	40.78	55.53	59.38	48.60	43.78
6	Braco	48.39	51.19	34.50	51.19	44.28	38.60	39.61	39.74	37.66
7	Lancaster	50.94	53.29	38.10	55.76	50.23	44.21	45.98	46.51	41.72
8	Harmony Hall	43.29	46.60	30.91	49.43	47.40	43.73	44.29	41.79	42.20
9	Vale Royal	60.93	61.53	44.50	64.44	56.37	60.40	57.23	56.47	56.24
10	Lottery	52.88	47.34	41.37	55.22	47.51	43.68	46.91	45.27	48.40
11	Cave Valley	67.59	77.59	55.38	80.40	62.12	62.16	62.08	64.38	71.04
12	Morant Pt. L. H.	72.06	82.51	65.82	73.67	66.04	65.55	69.95	77.57	56.04
13	Kingston	34.98	47.84	25.28	40.34	27.76	32.32	32.51	40.13	18.85
14	Plumb Point L. H.	38.48	45.56	25.25	43.05	27.30	31.05	28.75	36.71	18.08
15	Windsor	73.84	83.87	62.23	54.77	61.44	66.75	58.54	74.60	64.87

Now it is evident that some of these places should be combined together so as to obtain a distribution of the places or localities as uniform as possible; Nos. 4 to 10 inclusive should be combined for the locality we may call "Trelawny;" and Nos. 13 and 14 should be combined for the locality we may call "Kingston Harbour."

II. Rainfall at each place or locality for each group of five years.

Place or locality.	1	2	3	4	5	6	7	8	9	Average.
	1870 to 1874.	1875 to 1879.	1880 to 1884.	1885 to 1889.	1890 to 1894.	1895 to 1899.	1900 to 1904.	1905 to 1909.	1910 to 1914	
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Hill Gardens	104.38	142.50	78.57	107.97	105.30	111.77	99.85	108.33	89.42	105.34
Albion	78.00	78.40	63.75	87.69	83.11	76.70	81.18	74.09	72.90	77.31
Drax Hall	67.91	66.40	60.32	73.79	68.80	55.60	76.85	61.74	52.31	64.86
Trelawny	51.85	51.48	36.24	51.19	46.57	47.46	49.78	46.56	44.87	47.33
Cave Valley	67.59	77.59	55.38	80.40	62.12	62.16	62.08	64.38	71.04	66.97
Morant Point L. H.	72.06	82.51	65.82	73.67	66.04	65.55	69.95	77.57	56.04	69.91
Kingston Harbour	34.23	46.70	25.26	41.70	27.53	31.68	30.63	38.42	18.46	32.73
Windsor	73.84	63.87	62.23	54.77	61.44	66.75	58.54	74.60	64.87	64.54
Average	68.73	76.18	55.95	71.40	65.11	64.71	66.11	68.21	58.74	66.12

Looking along the lowest line we see that the third group has the smallest rainfall, and that the second and fourth groups have the largest and next largest rainfall during the 45 years; that is to say, the principal minimum falls between the two principal maxima; and as the other groups have nearly the average until we come to the ninth when another minimum occurs, it follows that there is no moderately long period such as we are searching for, with a considerable but gradual rise and fall as time flows on. And if it were suggested that there may be a strongly marked minimum every 30 years, the list of the Droughts in Jamaica given above does not show it.

Now the two principal maxima were apparently due to the flood rains of October 1879 and June 1885; and it appears that our groups of five years have not been able to smooth down such irregularities; and it will be as well to increase their length, which can easily be done by taking them to be 15 years.

III. Rainfall for each group of fifteen years.

Place or locality.	1870 to 1884	1885 to 1899.	1900 to 1914.	Average.
	in.	in.	in.	
Hill Gardens	108.48	108.35	99.20	105.34
Albion	73.38	82.50	76.06	77.31
Drax Hall	64.88	66.06	63.63	64.86
Trelawny	46.52	48.41	47.07	47.33
Cave Valley	66.85	68.23	65.83	66.97
Morant Pt. L. H.	73.46	68.42	67.85	69.91
Kingston Harbour	35.40	33.63	29.17	32.73
Windsor	36.64	60.99	66.00	64.54
Average	66.95	67.07	64.35	66.12

In this table, Albion, Drax Hall, Trelawny, and Cave Valley, agree in making the second group somewhat larger than the first and third; while Windsor gives exactly opposite results.

Morant Point and Kingston Harbour show a small continual fall from the first to the third; and Hill Gardens, while steady in the first and second, shows a marked fall in the third.

Consequently, even if we had found a "period" from Table II, it would only have been an average from conflicting districts, and could have had no real physical basis such as we have claimed for the short period of five and a half years.

With reference to the lowest line in Table III, there is a marked drop in the third group; and this is due to the strongly marked drop in the ninth group in Table II. If we were to arrange the groups in that table in the following manner:—

	in.
Groups 1, 2, 3—1870 to 1884—	66.95
" 4, 5, 6—1885 to 1899—	67.07
" 7, 8—1900 to 1909—	67.16

we may say that there has been perfect uniformity in the rainfall for the 40 years from 1870 to 1909, but that the drought of recent years has been so great that even groups of 15 years cannot smooth it down, coming as it does at the end of the present series.

We may here pause awhile; in another article there will be much to consider with regard to certain spells of long continued dry or wet weather at different places which do not affect the Island generally, as shown in Table I; their importance to agriculture can hardly be over-estimated.

And it will be as well to collect all the information we have before 1870; for instance Albion, Windsor, and Bradfield, all commenced in July 1865; and the latter may be said to be continued by the present Claremont register. A register was kept at Moreland from 1851 to 1880, and it may similarly be said to be continued by the register at Moneymusk. Denbigh began in 1862, and is continued to the present time. And although none of these registers are perfect, yet they are very valuable as the earliest records we have, and demand careful attention.

MAXWELL HALL,
Government Meteorologist.

April 14th, 1910.

No. 441.

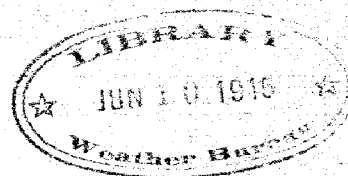


JAMAICA

WEATHER REPORT

FOR THE MONTH OF

APRIL, 1915.



The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS:

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extremes Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.915	29.837	76.8	79.1	81.7	71.5	10.2	86.0	2	62.0	15	24.0
Kingston	24	29.895	29.858	73.7	83.1	86.6	70.7	15.9	90.4	7	67.1	30	23.3
Negril Point Light House	33	29.911	29.868	74.9	81.8	84.3	70.3	14.0	89.3	20	64.6	15	24.7
Castleton Gardens	496	..	..	68.8	79.4	84.6	65.3	19.3	91	1	59	30	32
Hope Gardens†	668	29.854	29.817	72.1	84.6	86.1	66.6	19.5	91	1	63	4*	28
Stony Hill Indus. School	1,400	..	..	68.8	77.8	81.8	64.3	17.5	87	1	63	7*	24
Hill Gardens	4,900	25.228	25.184	61.6	63.2	67.5	54.2	13.3	71	6	51	5*	20

STATIONS.	Elevation.	Dew Point and Humidity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.	7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
Morant Pt. Light House	8	71.4	83	72.5	81	10.92	340	NNE. 16.0	N.E. 16.6	3.8	0.7	1.4	4.9	0.7	0.7	..	..
Kingston	24	67.3	80	70.4	66	5.08	190	N. 6.2	S.E. 10.9	1.1	1.3	2.0	2.9	2.0	1.9	..	..
Negril Point Light House†	33	66.9	76	68.7	65	3.56	289	ENE. 10.5	NNE. 13.9	2.6	1.6	2.0	2.8	3.6	1.0	..	..
Castleton Gardens	496	65.1	87	68.6	72	7.41	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens	668	65.1	79	63.7	53	6.31	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	66.2	91	67.5	70	15.35	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	55.6	81	59.7	90	6.42	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

† Negril Point Light House. Wind 11 p.m. N.E. 11.7

Plumb Point Light House { Average No. of Miles of wind per diem 233
 Greatest on the 4th 620
 Least on the 17th 105

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

APRIL, 1915.					
NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
Manchioneal	In. 30.28	In. 9.68	25	14	5.21
Spring Valley, Portland	32.92	8.40	23	16	
Bath	21.26	7.95	26	12	5.65
Boston	16.39	5.05	25	10	5.68
Moore Town	25.61	5.00	24	16	9.77
Port Antonio	22.55	4.40	21	17	6.27
Fellowship	26.04	5.00	22	21	9.24
Windsor, Portland					
Johnson River Bridge	14.43	4.82	26	13	4.38
Shrewsbury	26.36	6.00	23	14	7.60
Cedar Valley, St. Thos.	8.67	2.00	24	9	3.94
*Hope Bay	40.80	21.00	22	18	
Moy Hall, St. Thos.	6.69	1.88	24	9	3.71
Brooklodge	5.56	1.60	24	12	
Lennox	35.20	18.80	22	16	
Farm Hill	5.72	1.71	26	9	5.01
Hill Gardens	6.42				6.09
Buff Bay	29.54	12.40	22	15	5.73
Vinery	21.28	8.13	22	15	
Windsor Castle, Port.	21.13	11.17	22	10	
Greenvale, Portland	14.91	2.73	23	17	
Mt. Holstein	9.37	1.40	23	23	6.00
Irish Town	5.64	2.00	14	6	1.11
Rose Hill	8.07	1.38	23	11	
Hardware Gap	10.00				5.86
Stony Hill Ind. School	15.35	2.90	14	13	5.24
Castleton Gardens	7.41				6.80
Lawrence Tavern	6.44	1.85	28	7	2.24
Cedar Valley, Red Hills					
Carew Castle	10.16	2.00	28	12	5.05
Agualta Vale	15.88	8.28	22	15	
Water Valley	20.12	8.15	22	16	4.78
Albany, Ry. Station					
Platfield	3.62	1.20	24	12	
Richmond, St. Mary	8.10	2.20	28	7	4.54
Hampstead, St. Mary	19.61	9.32	22	14	
Troja					
Guy's Hill	12.51	6.20	28	13	
Lucky Hill	12.98	4.53	24	12	4.89
Rio Hoe	3.36	1.25	24	8	4.38
Unity Valley	3.86	1.62	24	14	4.61
Moneague	2.83	1.25	24	10	4.04
Claremont					
Albion, St. Ann	3.55	1.93	24	12	4.38
Averham Park	3.85	1.50	24	7	4.73
Means	13.43				

APRIL, 1915.					
NORTHERN DIVISION.	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
Port Maria	In. 14.39	In. 4.15	22	13	3.88
Ocho Rios	17.73	7.78	22	5	2.83
Bogue, Ocho Rios	19.92	8.15	22	6	
Rockfield	12.47	4.15	22	15	
Drax Hall	15.60	5.20	22	9	3.21
Liberty Hill	15.52	6.70	22	10	
St. Ann's Bay	13.37	4.84	25	10	3.06
Seville	12.04	3.60	22	7	2.79
Richmond Estate					3.88
Llandoverly	11.30	4.18	22	4	3.39
Runaway Bay	6.20	3.00	22	5	
Brown's Town	6.54	2.30	27	7	3.28
Alexandria	2.95	1.65	24	5	
Chewmagna, St. Ann	7.02	3.65	11	9	2.87
Home Castle	6.87	2.15	25	8	3.23
Richmond Pen	7.70	1.85	11	7	3.47
Mahogany Hall	8.05	2.30	24	8	3.80
Barnstable	6.25	2.77	24	7	
Brampton Bryan					2.13
Bryan Castle	7.70	2.05	24	8	1.12
Braco	6.95	2.20	22	7	2.21
Arcadia	6.84	2.02	24	8	2.28
Lancaster					2.26
Harmony Hall					2.07
Vale Royal	6.38	2.69	24	6	2.84
Colchis Pen	5.22	1.48	24	9	3.08
Swanswick	5.72	2.60	24	11	
Georgia	4.15	1.85	24	6	2.37
Long Pond	5.37	0.82	25	8	1.58
Hyde Hall	4.97	1.90	24	6	2.51
Steelfield	4.31	0.49	25	8	2.41
Etingdon	4.40	1.25	24	7	1.72
Lottery	4.45	7.60	24	9	2.30
Falmouth	2.08	0.66	25	8	2.20
Florence Hall	3.31	1.71	24	6	
Good Hope	4.67	1.45	24	8	
Unity	7.54	1.78	24	11	
Kent	6.50	2.25	24	6	2.39
Gales Valley					3.37
Canaan	5.31	2.52	26	8	3.62
Content	5.60	1.54	27	7	2.35
Bellfield					
Gullsbro	7.66	2.90	24	11	3.25
Moor Park	6.27	2.07	27	8	2.99
Rose Hall	4.35	2.20	25	4	
Running Gut	4.15	2.10	25	4	
Cinnamon Hill	4.90	2.55	25	4	
Success	4.69	2.79	25	4	
Montego Bay	7.20	2.09	22	9	3.71
Catherine Hall	7.21	2.20	22	9	4.16
Retirement	8.95	3.68	27	12	
King Gate	14.10	3.30	24	11	3.70
Round Hill					2.68
Blue Hole	8.12	4.18	24	6	
Haughton Court	3.95	3.22	24	5	
Lucca	2.15	1.05	24	4	4.07
Green Island, Police St.	7.19	4.04	24	7	
Means	8.02				

CENTRAL SUB-DIVISION.					
Headworks, Rio Cobre	70.8	1.60	14	12	3.62
Linstead	13.65	3.40	14	12	4.43
Berkshire Hall	8.48	2.87	28	13	2.40
Point Hill	9.13	1.90	26	14	6.07
Marlie Hill					
Worthy Park	7.17	1.25	24	11	3.44
Croft Hill	4.50	1.27	24	9	
Chapelton	5.40	1.53	24	15	3.57
Danks Works	6.35	1.53	24	13	4.67
Savoy House	6.91	1.53	24	14	4.09
Crooked River	4.25	1.72	24	10	
Trout Hall	4.77	1.37	24	13	
Cave Valley	5.63	1.50	15	18	2.93
Means					

* Gauge overflowed.

WEST-CENTRAL DIVISION.						SOUTHERN DIVISION.					
APRIL, 1915.						APRIL, 1915.					
Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	
	Amount.	Date.					Amount.	Date.			
Whitney	In. 5.10	In. 2.10	24	9	5.58	Morant Point L. H.	In. 10.92	In. 2.59	23	14	2.99
Mochó, Clarendon	6.45	2.15	24	6	...	Elliott Hill	21.47	7.12	27	16	...
Baillieston	4.45	1.35	13	11	5.28	Pleasant Hill	20.23	7.40	26	14	...
Brokenhurst	10.70	4.10	25	11	5.25	East Prospect	19.36	10.45	26	9	...
Christiana	5.01	1.41	24	10	8.10	Morant Bay	16.73	8.78	26	9	2.55
Chudleigh	7.48	2.00	24	15	...	Easington	7.59	2.25	3	10	1.73
Shooter's Hill	4.89	1.61	24	13	...	Bull Bay	6.12	2.17	14	5	0.85
Spitzbergen	5.71	1.50	24	12	...	Gordon Town	6.67	1.80	13	11	3.32
Kendal, Manchester	6.06	2.05	24	13	7.44	Hope Gardens	6.31	...	...	...	...
Marshall's Pen	9.04	2.45	25	11	5.90	King's House Gardens	...	...	...	...	...
Mandeville	8.79	3.65	25	11	5.96	Halfway Tree	5.73	1.12	24	11	1.63
Carlton, Mandeville	7.63	3.85	24	10	6.29	Lunatic Asylum	5.50	1.89	14	10	1.07
The Hill	8.16	1.90	24	10	...	Upper Elletson Road	5.70	2.04	3	11	...
Fairfield, Manchester	7.52	1.68	12	14	6.46	Kingston P. W. Office	5.08	1.38	14	9	1.01
Ulster Spring	10.18	2.30	11	12	6.20	Plumb Point L. H.	5.28	1.66	15	13	0.90
Freeman's Hall	7.25	1.80	11	10	...	Clifton Pen	6.19	1.37	14	8	...
Albert Town	7.17	2.05	11	8	...	Quarantine Station	3.96	1.11	24	9	...
Lowe River	11.47	2.30	21	10	5.60	Spanish Town	6.17	1.26	24	12	2.30
Troy	5.72	1.00	28	8	9.62	Hog Hole, St. Catherine	...	...	...	...	2.96
Windsor Pen, Trel.	6.43	1.20	25	13	6.10	Hartlands	10.49	3.00	3	11	2.25
Medina	8.80	1.46	27	11	...	Belmont, Guanaboa Vale	9.16	2.66	14	12	...
Wallingford	7.58	2.12	26	13	...	Old Harbour	...	...	...	...	2.87
Balacava Police Station	8.00	1.47	23	11	9.66	May Pen	6.46	2.03	24	8	2.92
Siloah	11.63	1.35	21	14	9.16	Hillside	...	...	...	...	2.20
Appleton Estate	...	...	...	...	9.67	Moreland	...	...	...	...	1.60
Maggotty	14.44	4.07	21	11	9.39	Money Musk	3.83	2.65	24	5	1.72
Butlers	...	...	...	...	...	Dunkley's, Vere	4.50	2.60	24	7	2.16
Dromilly Pen	9.58	2.94	24	7	...	Dry River	4.10	2.40	24	6	...
Spring Vale	...	...	...	...	5.44	Denbigh	4.30	2.25	24	5	2.62
Garland	...	...	...	...	...	Toll Gate	9.56	2.15	24	10	...
Mochó, Catadupa	...	...	...	...	...	Woodleigh	4.22	2.20	24	5	...
Springfield, St. Elizabeth	9.38	2.50	21	9	3.37	New Yarmouth	5.50	2.64	24	7	2.31
Chesterfield, St. James	...	...	...	...	...	Exeter, Vere	4.43	2.60	24	6	2.22
Catadupa Rly. Station	7.70	2.25	27	10	...	Rhynsbury	4.46	2.77	24	10	2.21
Kempshot	8.54	2.47	24	12	5.54	Milk River	5.20	3.00	24	5	2.25
Cambridge, St. James	6.69	2.45	27	10	...	Clarendon Pk. Ry. St.	...	...	...	...	...
Ducketts	...	...	...	...	...	Victoria Town	...	...	...	...	3.83
New Market, Police St.	7.81	1.76	25	8	...	Hog Hole, S. Manch.	9.39	3.15	24	10	...
The Bog, New Market	8.69	2.10	24	12	...	Stone's Hope	4.57	2.45	24	4	4.13
Kew Park	6.38	2.26	26	8	8.27	Newport, Manchester	...	...	...	...	4.96
Knockalva	12.03	4.59	26	9	...	Great Valley, Man.	4.05	2.25	24	5	4.05
Ramble	14.12	4.80	26	10	...	Alligator Pond	...	...	...	...	3.20
Petersville	3.46	1.36	24	9	7.35	Southfield, St. Elizabeth	3.68	3.03	24	8	...
Darliston	8.53	2.27	26	10	11.40	Lititz	4.96	1.30	11	11	...
Bluefields	3.11	1.20	24	4	8.80	Long Hill	...	...	...	...	7.64
Whithorn	7.40	2.50	26	12	7.98	Torrington	5.33	1.47	24	8	4.53
Water Works Pen	5.52	1.55	17	8	...	Bethlehem, St. Eliz.	7.90	2.00	12	12	6.30
Great Valley, Han.	6.60	2.20	24	9	7.62	Santa Cruz	9.30	1.90	12	14	9.34
Prospect Park	...	...	...	...	...	Pedro Plains Police St.	1.86	1.45	24	5	4.12
Blackheath	4.60	1.00	23	8	...	Mountainside	5.46	1.59	12	8	...
Fontabelle, Westm.	4.45	1.54	27	6	5.94	Black River	3.44	1.22	24	10	7.42
Belleisle	...	...	...	...	6.98	Font Hill	3.15	1.20	24	8	8.84
Morgan's Bridge	7.32	1.64	24	8	6.14	Mount Edgecombe	6.72	2.48	26	6	8.23
King's Vale Police St.	8.25	4.19	24	3	5.90	Sweet River	5.15	1.35	27	9	9.81
Means	7.54	...	...	...	...	Windsor, Sav.-la-mar	4.59	1.56	12	9	9.46
						Orchard	5.97	1.92	27	10	...
						Sav.-la-mar	7.43	2.75	27	6	9.29
						Meyersfield	3.58	1.18	28	5	...
						Little London	5.07	1.64	21	7	...
						Retreat	6.11	2.32	25	6	9.09
						Negril Point L.H.	3.56	1.18	24	9	5.83
						Means	6.09	...	...	...	...

NOTES.				SHOCKS OF EARTHQUAKE IN APRIL, 1915.				
COMPARATIVE TABLE OF RAINFALL.								
(Based upon the "Average" Stations only.)								
			APRIL.		Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, etc.
			1915.	Average.				
			In.	In.				
North-Eastern Division	...	13.43	5.31		hr.	min.		
Northern	"	...	8.02	3.05				
West-Central	"	...	7.54	7.13				
Southern	"	...	6.09	3.24				
The Island	...	8.77	4.68					
				No earthquakes this month.				

The heavy rainfall this month was due to a large shallow barometric depression which developed far to the NW of Jamaica and passed slowly along a SE course as far as Haiti. Rains fell over Jamaica between the 21st and 28th, but flood rains on or near the coast were experienced only between Port Antonio and Port Maria. The following list gives some of the heaviest falls:—

	Total.	In one day.	Date.
Manchianesl	30.28	9.68	25th
Spring Valley	32.92	8.40	23rd
Hope Bay	40.80	21.00 ✓	22nd
Lennox	35.20	18.80	22nd
Buff Bay	29.54	12.40	22nd

Roads were damaged; landslides on the Railway occurred; the town of Port Maria was flooded; bananas were washed away by the rivers in flood; and other damage was done.
Beneficial rains fell over the rest of the Island.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

No. 442.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF

MAY, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.934	29.897	80.9	83.0	84.7	77.1	7.6	87.0	25	64.5	1	22.5
Kingston	24	29.904	29.863	77.8	81.7	87.6	73.5	14.1	91.0	7	67.9	1	23.1
Negril Point Light House	33	29.905	29.871	78.8	83.8	86.2	72.7	13.5	89.5	31	66.0	1	23.5
Castleton Gardens	496	..	..	70.0	84.0	87.8	68.4	19.4	95	6*	61	2	34
Hope Gardens†	668	29.899	29.825	76.1	84.6	88.5	69.9	18.6	92	6*	65	2	27
Stony Hill Indus. School	1,400	..	..	70.9	80.9	84.2	67.3	16.9	90	5*	64	1*	26
Hill Gardens	4,900	25.237	25.209	63.5	66.0	70.4	57.7	12.7	76	6*	51		25

STATIONS.	Eleva- tion.	Dew Point and Hu- midity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.		3 p.m.				7 a.m.		3 p.m.		7 a.m.			3 p.m.		
	ft.	°	°	°	°	in	miles		m.		m.	L.	M.	U.	L.	M.	U.
Morant Pt. Light House	8	75.2	82	76.4	88	6.04	286	ENE.	16	ENE.	14	3.8	1.2	1.1	3.2	1.3	1.2
Kingston	24	71.2	80	74.3	71	3.08	237	NE.	6	SE.	18	1.1	1.7	1.2	2.3	2.3	1.7
Negril Point Light House†	33	72.3	80	74.2	73	3.96	212	E.	8	SSE.	12	2.3	0.1	3.3	4.2	3.8	0.5
Castleton Gardens	496	67.9	93	73.7	72	734	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens	668	68.1	76	70.9	63	593	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	67.4	88	70.9	71	6.18	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	581	81	62.5	70	6.75	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House. Wind 11 p.m.

E. 8.3

Plumb Point Light House { Average No. of Miles of wind per diem
Greatest on the 5th
Least on the 27th

313

583

123

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

MAY, 1915.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.							Greatest fall in 24 hours.							Days on which 0.01 or more fell.		Average.	
							Total fall.	Amount.	Date.								
							In.	In.						In.			
NORTHERN DIVISION.							Port Maria	8.65	1.36	26	10	6.61					
						Ocho Rios	5.33	2.68	15	5	5.20						
						Bogue, Ocho Rios	7.39	3.75	15	6							
						Rockfield											
						Drax Hall	7.00	4.05	15	11	7.10						
						Liberty Hill	7.24	4.70	15	9							
						St. Ann's Bay	6.59	4.64	15	8	5.64						
						Seville	5.76	3.60	15	6							
						Richmond Estate	3.45	1.37	16	8	7.42						
						Llandoverly	3.40	1.74	16	4	7.11						
						Runaway Bay	1.95	0.80	15	4							
						Brown's Town	5.22	3.12	18	4	7.23						
						Alexandria	3.60	2.10	18	4							
						Chewmagna, St. Ann	3.56	2.12	18	7	6.70						
						Home Castle	3.40	1.70	18	5	6.13						
						Richmond Pen	2.30	1.15	18	5							
						Mahogany Hall											
						Barnstable	4.06	1.65	14	5							
						Brampton Bryan											
						Bryan Castle	3.40	1.00	15	7	5.49						
						Braco	3.40	1.70	15	5	4.90						
						Arcadia	3.90	1.43	14	8	4.98						
						Lancaster	3.87	1.00	14	8	5.40						
						Harmony Hall	4.18	1.06	15	8	4.88						
						Vale Royal	5.65	2.15	14	10	6.34						
						Colchis Pen	1.60	0.58	14	9	7.15						
						Swanswick	4.63	2.40	14	12							
						Georgia	4.42	1.80	14	8	5.77						
						Long Pond	4.29	1.86	14	10	5.30						
						Hyde Hall	3.52	1.53	14	10	5.27						
						Steelfield	3.60	1.65	14	10	5.86						
						Etingdon	3.40	1.25	14	6	4.34						
						Lottery	4.15	1.05	14	11	6.35						
						Falmouth	6.80	2.30	16	13	5.19						
						Florence Hall	6.88	1.74	15	11							
						Good Hope	9.12	2.00	18	12							
						Unity	9.08	2.71	18	12							
						Kent	6.12	1.52	18	9	5.43						
						Gales Valley											
						Canaan	11.39	2.50	18	13	7.55						
						Content	4.88	1.72	18	8	6.86						
						Bellfield	4.86	2.00	18	8							
						Guildsbro	11.29	2.26	17	17	8.61						
						Glasgow	6.89	1.75	18	13							
						Moor Park	7.73	1.70	18	11	6.69						
						Rose Hall	6.25	2.00	18	5	4.84						
						Running Gut	6.30	2.00	18	5	7.60						
						Cinnamon Hill	6.40	2.00	18	5	5.28						
						Success	6.00	1.90	16	5	4.57						
						Montego Bay	9.51	2.50	18	15	7.60						
						Catherine Hall	9.27	2.17	18	14	8.69						
						Retirement	9.27	1.79	17	16							
						King Gate	15.45	2.80	29	14	9.18						
						Round Hill	2.94	1.00		6							
						Blue Hole	15.31	4.60	29	11							
						*Houghton Court	16.37	4.22	13	16							
						Lucea	16.21	3.26	13	17	8.09						
						Green Island, Police St.	9.29	1.72	14	10							
						CENTRAL SUB-DIVISION.											
						Headworks, Rio Cobre	5.80	3.04	17	6	7.71						
						Linstead	4.05	2.50	17	7	9.64						
						Berkshire Hall	3.74	1.00	13	12	5.43						
						Point Hill	3.20	1.60	17	12	12.80						
						Marble Hill	2.54	1.37	14	3							
						Worthy Park	1.54	0.62	18	5							
						Croft Hill	2.08	0.58	20	6							
						Chapelton	2.91	1.22	14	6	8.47						
						Danks Works	2.74	1.18	14	7	9.22						
						Savoy House	2.80	1.16	14	7	8.03						
						Crooked River	2.67	1.10	18	5							
						Trout Hall	4.77	3.28	18	8							
						Cave Valley	3.55	1.65	18	6							
						NORTH-EASTERN DIVISION.											
						Total Fall.	Amount.	Date.	Days on which 0.01 or more fell.		Average.						
						In.	In.				In.						
						Manchieneal	9.07	3.30	16	12	14.77						
						Spring Valley, Portland	13.95	4.49	16	17							
						Bath	12.47	3.20	15	20	12.75						
						Boston	16.38	2.05	16	12	16.55						
						Moore Town	6.86	4.00	15	6	16.96						
						Port Antonio	15.87	5.18	18	10	16.66						
						Fellowship	17.74	6.08	17	16	20.85						
						Windsor, Portland											
						Johnson River Bridge	11.22	4.57	14	6	9.52						
						Shrewsbury	14.13	5.00	17	6							
						Cedar Valley, St. Thos.	12.63	5.20	17	8	9.33						
						Hope Bay	13.05	6.20	18	8							
						Moy Hall, St. Thos.	12.00	4.50	17	12	9.44						
						Brooklodge	11.78	4.55	17	11							
						Lennox	13.60	4.50	17	9							
						Farm Hill	8.04	3.75	17	6	6.57						
						Hill Gardens	6.76										
						Buff Bay	8.52	3.15	17	6	8.15						
						Vinery	10.31	4.95	15	10							
						Windsor Castle, Port.	9.06	2.87	18	5							
						Greenvale, Portland	9.37	3.45	15	10							
						Mt. Holstein	7.21	1.84	17	15	8.14						
						Irish Town	5.05	3.50	17	4	5.24						
						Rose Hill	6.73	3.06	17	4							
						Hardware Gap	5.90				12.57						
						Stony Hill Ind. School	6.18	4.34	17	7	9.73						
						Castleton Gardens	7.34										
						Lawrence Tavern	5.56	1.50	17	9	9.12						
						Cedar Valley, Red Hills	6.65	5.57	17	4							
						Carew Castle	2.83	1.17	17	9	9.23						
						Aguaite Vale	5.19	1.45	16	10							
						Water Valley	9.64	3.31	29	11	7.23						
						Albany, Ry. Station											
						Platfield											
						Richmond, St. Mary	6.62	1.36	26	10	7.45						
						Hampstead, St. Mary	12.85	2.79	15	16							
						Troja											
						Gray's Hill	8.19	1.23	9	14							
						Lucky Hill	6.52	1.20	1	11							
						Rio Hoe	2.00	0.64	14	9	8.48						
						Unity Valley	2.30	0.66	10	11	9.99						
						Moneague	2.84	1.03	10	10	8.26						
						Claremont	3.25	1.74	14	5	7.34						
						Albion, St. Ann	3.39	1.35	14	9	8.46						
						Averham Park	4.21	1.72	14	8	8.25						
						Means	7.99				Means						
							5.70										

* Gauge overflowed.

		MAY, 1915.							MAY, 1915.				
WEST-CENTRAL DIVISION.		Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	SOUTHERN DIVISION.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
			Amount.	Date.						Amount.	Date.		
	In.	In.				In.		In.	In.			In.	
Whitney	7.05	3.20	18	9	10.85	Morant Point L. H.	6.04	3.64	16	12	10.76		
Mocho, Clarendon	7.95	2.80	14	5	...	Elliott Hill	9.58	3.88	17	20	...		
Baillieston	4.21	1.20	18	10	10.41	Pleasant Hill	10.07	4.10	16	19	...		
Brokenhurst	12.30	5.60	18	11	10.02	East Prospect	12.24	4.53	16	16	...		
Christiana	...	...	...	...	...	Morant Bay	8.69	3.40	16	18	8.00
Chudleigh	9.13	5.85	18	11	...	Easington	7.58	2.56	17	9	6.33		
Shooter's Hill	9.77	6.99	18	11	...	Bull Bay	5.22	3.20	17	4	4.13		
Spitzbergen	9.47	5.99	18	10	...	Gordon Town	...	...	...	...	...
Kendal, Manchester	11.21	8.25	18	6	10.16	Hope Gardens	5.93	...	...	...	...
Marshall's Pen	10.31	6.84	18	10	10.01	King's House Gardens	...	...	...	...	...
Mandeville	11.88	8.00	18	11	11.17	Halfway Tree	5.76	3.82	17	4	4.87		
Carlton, Mandeville	9.11	6.13	18	9	...	Lunatic Asylum	4.36	2.50	17	4	3.57		
The Hill	5.50	1.95	17	8	...	Upper Elletson Road	4.48	2.75	17	5	...		
Fairfield, Manchester	3.11	1.25	17	11	7.87	Kingston P. W. Office	3.08	1.95	17	5	4.63		
Ulster Spring	4.82	1.95	14	7	11.61	Plumb Point L. H.	6.92	3.03	18	5	4.80		
Freeman's Hall	3.80	1.40	18	7	...	Clifton Pen	5.30	3.80	17	2	...		
Albert Town	3.42	1.25	24	6	...	Quarantine Station	2.85	1.93	17	5	...		
Low River	8.76	2.89	23	11	8.38	Spanish Town	8.04	6.40	17	4	5.77		
Troy	6.91	2.21	18	4	17.69	Hog Hole, St. Catherine	5.75	3.65	17	4	6.79		
Windsor Pen, Trel.	7.79	2.65	18	14	10.96	Hartlands	6.02	3.50	17	4	4.34		
Medina	3.95	2.94	18	5	...	Belmont, Guanaboa Vale	2.33	1.27	17	7	...		
Wallingford	1.13	0.55	18	5	...	Old Harbour	4.09	2.15	17	7	5.78		
Balaclava Police Station	1.30	0.56	15	5	14.41	May Pen	3.44	1.21	14	6	6.84		
Siloah	7.42	2.00	26	9	15.27	Hillside	...	...	...	...	...
Appleton Estate	...	...	...	...	...	Moreland	...	...	...	...	...
Maggotty	3.52	1.89	16	8	...	Money Musk	...	...	...	...	...
Butlers	3.11	1.16	25	5	...	Dunkley's, Vere	5.75	1.80	17	10	4.50		
Dromilly Pen	10.86	2.60	18	11	...	Dry River "	5.90	1.47	17	11	...		
Spring Vale	16.19	6.04	28	12	13.57	Denbigh	3.34	1.14	17	4	7.61		
Garland	...	...	...	...	...	Toll Gate	6.45	2.64	18	8	...
Mocho, Catadupa	...	...	...	...	...	Woodleigh	3.20	1.15	17	4	...
Springfield, St. Elizabeth	2.61	1.00	26	7	...	New Yarmouth	6.38	1.96	18	8	4.86		
Chesterfield, St. James	...	...	...	...	...	Bxeter, Vere	5.12	1.42	16	11	4.94
Catadupa Rly. Station	4.44	1.70	26	11	...	Rhymesbury	5.78	2.37	17	9	5.89		
Kempshot	10.51	2.54	27	18	10.37	Milk River	5.20	3.20	18	5	5.84		
Cambridge, St. James	8.31	1.86	26	18	...	Clarendon Pk. Ry. St.	5.87	2.40	18	8	...		
Ducketts	...	...	...	...	...	Victoria Town	7.08	3.00	18	10	9.18
New Market, Police St.	2.93	1.60	16	5	...	Hog Hole, S. Manch.	10.59	3.82	18	11	...		
The Bog, New Market	4.73	1.86	16	8	...	Stone's Hope	5.13	3.15	17	5	9.30		
Kew Park	3.27	1.15	14	8	12.91	Newport, Manchester	7.07	2.67	17	11	8.37		
Knockalva	6.30	1.34	14	15	...	Great Valley, Man.	4.04	1.82	17	7	6.99		
Ramble	7.99	1.47	14	13	...	Alligator Pond	1.37	0.50	17	3	5.86		
Petersville	1.98	1.16	16	7	12.19	Southfield, St. Elizabeth	3.61	1.85	17	7	...		
Darliston	6.71	2.33	26	14	16.91	Lititz	1.20	0.90	17	6	...		
Bluefields	1.88	0.89	16	6	...	Long Hill	...	...	...	...	...
Whithorn	4.26	1.50	13	10	14.88	Torrington	4.05	1.75	17	4	...		
Water Works Pen	3.97	1.10	13	9	...	Bethlehem, St. Eliz.	4.04	1.52	16	8	7.64		
Great Valley, Han.	11.38	2.90	29	17	14.22	Santa Cruz	0.83	0.33	17	6	12.81		
Prospect Park	5.17	1.00	10	15	...	Pedro Plains Police St.	2.42	1.43	15	5	4.12		
Blackheath	5.59	2.16	27	6	...	Mountainside	2.07	1.10	16	4	...		
Fontabelle, Westm.	7.81	2.53	26	21	9.36	Black River	1.75	0.90	16	6	7.42		
Belleisle	...	...	...	...	...	Font Hill	1.30	0.60	24	4	8.84
Morgan's Bridge	6.62	2.80	26	6	12.36	Mount Edgecombe	1.81	1.54	16	7	8.23		
King's Vale Police St.	8.90	2.15	13	15	9.76	Sweet River	3.60	1.30	20	7	9.81		
Means	7.60	...	...	...	...	Windsor, Sav.-la-mar	2.36	0.80	13	9	9.46
						Orchard	3.41	0.84	26	8	...		
						Sav.-la-mar	1.45	0.45	16	8	9.29		
						Meylersfield	1.57	0.80	26	5	...		
						Little London	1.72	0.55	26	6	...		
						Retreat	1.72	0.72	26	4	9.09		
						Negril Point L.H	3.96	1.60	11	7	5.88		
						Means	4.47	...	...	...	...

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

	MAY.	
	1915.	Average.
	In.	In.
North-Eastern Division	7.99	10.82
Northern "	5.70	7.07
West-Central "	7.60	12.49
Southern "	4.47	6.94
The Island	6.44	9.33

The greatest rainfall, 17.74, was recorded at Fellowship; and the lowest, 1.13, was recorded at Wallingford. The rainfall was very unevenly distributed: fairly good rains fell in the E, NE, and N of the island as far as Lucea and Green Island; and fairly good rains fell in Manchester. But the Central sub-division was dry: and hardly any rain fell in the SW of the Island.

SHOCKS OF EARTHQUAKE IN MAY, 1915.

Date.	Standard Time (Approx.)		Intensity.	Notes: where felt, etc.
4	5	25 p.m.	I	Mt. Holstein: N & S, 0.004: preceded by sound.
8	5	54 "	II	Great Valley, Han. Double shock N & S, E & W. Also felt at Kempshot, Windsor Pen, Siloah, Butlers and Petersfield. At Kempshot it lasted 4 sec. N. and S.
22	10	45 a.m.	II	Linstead, Ewarton, &c. Double shock.
27	3	45 "	II	Yallahs.

NOTES.

May 4th. From B or B₂, due 2nd and 4th, both near Mt. Holstein.
 May 8th. From D₂, due 8th: it seems to have stirred up D, not due, but the direction at Gt. Valley, and at Kempshot N & S, refer to D.
 May 22nd. From M₂ & M_w, due 21st and 22nd. Ewarton is between these epicentres.
 May 27. Unknown.

CORRIGENDA.

W.R. No. 429, p. 1; Morant Pt. Light-house—Read
 W.R. No. 439, p. 5; do. For April. "
 For means "

Bar.	Pressure.
7 a.m.	3 p.m.
29.975	29.636
29.974	29.934

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
 Government Meteorologist.

EVAPORATION.

The following table is taken from the Monthly Meteorological Reports issued at first from the office of the Chief Engineer, and subsequently continued by the Department of Operation and Maintenance of the Panama Canal.

Evaporation from the surface of Lake Gatun.

1914.	Evap- oration.	COLON.				
		Wind.	Humid.	Vapour.	Temp.	Rainfall.
	in.	miles per hr.		in.	°	in.
January	4.82	13.0	81	0.812	80.7	1.35
February	6.30	15.6	80	0.802	80.9	1.32
March	7.50	17.2	80	0.808	81.3	0.91
April	6.69	13.1	83	0.860	81.4	4.12
May	5.26	11.0	86	0.908	81.7	17.76
June	4.56	8.2	87	0.884	80.5	16.30
July	5.52	11.4	86	0.915	82.0	10.74
August	4.68	10.7	88	0.917	81.0	16.01
September	4.07	8.7	89	0.890	79.4	14.80
October	4.23	6.8	89	0.872	79.8	22.16
November	4.18	7.3	88	0.882	79.9	18.35
December	5.08	11.0	89	0.928	81.5	8.88
Totals	62.89	..	..	..	..	132.70
Means	5.28	11.2	86	0.873	80.8	..

Evaporation depends of course upon Humidity and Wind; if the air is saturated with moisture there can be no evaporation; and (100—humidity) may be taken to measure the drying power of the air; the effect of wind is obvious.

Evaporation has not been measured in Jamaica as far as I am aware, so that the above table may be of some value; it gives the evaporation from the surface of the lake, some 10 miles south of Colon; and as the wind at Colon is almost always northerly, the meteorological conditions will not be greatly different at the two places.

It will be seen that the monthly evaporation does not greatly differ from the mean, and any small variation from the mean may be roughly expressed by

0.27 Wind—0.034 Humidity.

In attempting to apply these figures to Jamaica we shall take the wind to be 5 miles an hour and the Humidity 82; and for the sake of comparison, Vapour 0.76, Temperature 77°, and Rainfall, 72 inches.

Hence we may expect that the evaporation from the exposed surface of water in Jamaica is about 4 inches a month, or 48 inches a year.

With reference to shallow ponds used on many cattle pens for water for the stock, the only wonder is that during long continued droughts they last so well; and the above result shows that deeper ponds paved with concrete are preferable to a larger number of shallow ponds, the expense being much the same in the two cases; but again, there is difficulty in keeping such deeper ponds clean.

With regard to tanks for domestic or public water supply, they should certainly be covered to prevent evaporation, and to keep out leaves and dust; it is no doubt true that sun and air purify water by killing germs; but a quantity of decaying vegetable matter at the bottom of a tank alters the conditions, and the water rapidly becomes impure.

In connection with evaporation a few words may be said about the amount of Dew deposited. According to a series of observations made by Prof. W. H. Pickering at Mandeville and published in the Quarterly Journal of the R. Meteor. Society for Oct. 1913, on an average 0.0045 in. of dew falls there every night: this amounts to only 0.14 in. a month, or to 1.64 in. a year; and may therefore be neglected as far as ponds and tanks are concerned, however beneficial it may be to vegetation.

June 10th, 1915.

M. H.

No. 443.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF

JUNE, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Eleva- tion.	Bar Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.931	29.902	82.9	84.4	86.4	73.8	7.6	88.0	27	73.0	15	15 0
Kingston	24	29.902	29.876	78.3	84.6	89.5	74.6	14.9	94.3	27	71.9	29	22 4
Negril Point Light House	33	29.900	29.881	80.1	83.7	87.5	74.7	12.8	91.1	27	71.6	16	19 5
Castleton Gardens	496	..	..	71.7	83.7	88.2	70.7	17.5	94	26	68	8*	26
Hope Gardens†	668	29.901	29.851	77.1	..	88.9	70.8	18.1	94	27	69	6*	25
Stony Hill Indus. School	1,400	..	..	72.2	80.8	84.1	69.6	14.5	90	27	68	8*	22
Hill Gardens	4,900	25.264	25.240	64.8	67.4	68.2	59.2	9.0	76	26	58	0*	18

STATIONS.	Elevation.	Dew Point and Humidity.		Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
Morant Pt. Light House	8	75.9	79	76.1	76	7.05	261	E.	16	E.	13	L. 3.3	M. 1.5	U. 0.9	3.3 1.0 1.2
Kingston	24	69.9	76	76.0	76	14.51	203	ENE.	5	SE.	14	1.6	0.7	2.8	3.1 2.1 2.2
Negril Point Light House†	33	73.4	79	75.7	77	5.85	229	ESE.	8	SE.	13	1.0	1.1	3.4	3.3 4.8 1.0
Castleton Gardens	496	69.9	93	73.6	72	16.33	..	..	..	..	..	..	..	..	..
Hope Gardens	668	69.5	79	76.4	..	10.26	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	69.1	90	73.0	77	15.63	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	59.4	81	64.1	90	19.68	..	..	..	..	..	..	..	..	..

* and on other days.

† Negril Point Light House. Wind 11 a.m. S.E. 8.3
 Average No. of Miles of wind per diem 243
 Greatest on the 23th 401
 Least on the 4th 99

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

JUNE, 1915.

JUNE, 1915.

NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.			Days on which 0.01 or more fell.	Average.
		Amount	Date.			
	In.	In.				In.
Manchioneal	14.56	4.54	15	11		10.20
Spring Valley, Portland	16.72	4.68	15	16		
Bath	16.54	3.40	14	15		13.29
Boston	20.17	6.90	15	12		16.35
Moore Town	30.86	9.01	14	12		25.57
Port Antonio	35.41	15.70	15	15		17.96
Fellowship	25.17	10.00	15	16		22.43
Windsor, Portland						
Johnson River Bridge	22.74	7.09	14	20		19.17
Shrewsbury	18.57	5.80	14	7		11.59
Cedar Valley, St. Thos.	33.16	7.04	15	11		19.90
Hope Bay	19.05	6.45	15	10		
Moy Hall, St. Thos.	33.70	7.75	15	13		13.82
Brookledge	26.26	6.76	15	12		
Lennox	18.70	5.75	14	10		
Farm Hill	27.22	6.16	15	9		6.78
Hill Gardens	19.68					8.11
Buff Bay	12.95	3.80	15	7		7.50
Vinery	10.39	3.60	15	8		
Windsor Castle, Port.	10.88	3.04	29	6		
Greenvale, Portland	13.28	3.41	14	10		
Mt. Holstein	13.93	3.06	15	15		8.16
Irish Town	10.26	3.12	15	7		4.97
Rose Hill	11.38	4.10	15	12		
Hardware Gap	16.64					7.86
Stony Hill Ind. School	15.68	4.90	15	15		7.47
Castleton Gardens	16.33					9.93
Lawrence Tavern	10.10	3.30	15	12		7.48
Cedar Valley, Red Hills	16.59	5.43	15	10		
Carew Castle	11.05	3.75	15	12		10.47
Agualta Vale	9.64	3.54	15	12		
Water Valley	7.87	3.38	15	15		6.01
Albany, Ry. Station						
Platfield	11.13	2.81	15	14		
Richmond, St. Mary	10.33	3.06	19	9		5.93
Hampstead, St. Mary	12.98	2.38	14	15		
Troja						
Guy's Hill	12.08	2.80	15	13		
Lucky Hill	9.12	3.10	15	8		
Rio Hoe	8.06	2.34	15	12		9.11
Unity Valley	9.50	3.90	16	12		8.56
Moneague	8.61	3.36	16	10		8.34
Claremont	10.17	1.80	15	9		6.43
Albion, St. Ann	8.09	1.86	16	10		6.97
Averham Park	7.72	1.87	15	12		6.31
Means	16.97					

JUNE, 1915.

NORTHERN DIVISION.

NORTHERN DIVISION.	Total fall.	Greatest fall in 24 hours.				Average.
		Amount.	Date.	Days on which 0.01 or more fell.		
Port Maria	In. 8.68	In. 2.78	15	9	5.53	
Ocho Rios	6.74	1.65	15	7	5.20	
Bogue, Ocho Rios	7.85	3.95	16	8	...	
Rockfield	6.59	1.45	15	8	...	
Drax Hall	8.15	1.80	16	10	5.16	
Liberty Hill	6.27	1.20	15	9	...	
St. Ann's Bay	6.27	1.33	7	12	4.30	
Seville	6.18	1.15	7	10	4.90	
Richmond Estate	4.29	1.07	28	11	5.04	
Llandovery	8.89	3.98	6	6	4.53	
Runaway Bay	3.38	0.70	14	8	...	
Brown's Town	3.89	1.42	14	6	4.74	
Alexandria	7.05	2.55	16	5	...	
Chewmagna, St. Ann	6.81	1.62	16	12	...	
Home Castle	3.00	1.30	14	8	4.48	
Richmond Pen	5.06	1.00	14	9	5.35	
Mahogany Hall	3.10	0.80	15	9	6.02	
Barnstable	3.25	0.90	14	6	...	
Brampton Bryan	...	...	...	...	...
Bryan Castle	2.70	1.05	15	7	3.63	
Braco	2.30	0.80	14	8	3.26	
Arcadia	3.83	1.05	14	9	4.46	
Lancaster	3.16	1.12	14	9	3.54	
Harmony Hall	4.55	1.25	14	11	3.03	
Vale Royal	4.19	1.20	6	6	4.69	
Colchis Pen	2.67	0.70	6	8	5.11	
Swanswick	4.35	1.22	11	8	...	
Georgia	3.88	1.45	11	10	3.92	
Long Pond	4.30	1.11	11	9	5.11	
Hyde Hall	4.18	1.05	11	11	5.24	
Steelfield	3.66	1.21	11	9	4.40	
Ettingdon	3.85	1.45	11	8	4.54	
Lottery	4.80	1.15	7	14	4.14	
Falmouth	2.66	0.62	8	10	2.88	
Florence Hall	3.67	0.86	7	10	...	
Good Hope	7.41	2.43	8	15	...	
Unity	8.00	1.75	8	13	...	
Kent	3.05	0.82	8	12	3.73	
Canaan	7.71	1.10	6	20	7.76	
Content	3.97	1.50	8	14	4.81	
Bellfield	6.31	2.27	8	11	...	
Guisbro	6.47	1.78	8	17	6.68	
Glasgow	4.41	1.35	8	14	...	
Moor Park	3.95	1.38	8	12	6.62	
Rose Hall	2.50	0.85	8	7	3.30	
Running Gut	2.65	1.00	8	7	3.32	
Cinnamon Hill	2.16	0.58	6	7	3.47	
Success	3.19	1.33	6	8	2.92	
Montego Bay	5.16	1.30	8	16	7.19	
Catherine Hall	4.30	1.12	10	13	7.30	
Retirement	3.88	1.28	8	19	...	
King Gate	7.17	2.73	24	17	9.92	
Round Hill	2.50	0.50	...	7	...	
Blue Hole	9.31	2.35	12	13	...	
Haughton Court	4.78	2.16	6	7	...	
Lucea	7.25	1.45	1	13	8.76	
Green Island, Police St.	6.46	1.30	6	11	...	
CENTRAL SUB-DIVISION.						
Headworks, Rio Cobre	14.27	4.75	15	11	6.16	
Linstead	16.18	4.80	15	10	8.59	
Berkshire Hall	12.88	3.86	5	13	8.65	
Point Hill	23.99	5.00	15	18	11.26	
Marlie Hill	19.76	6.62	15	15	...	
Worthy Park	...	...	...	...	...
Croft Hill	10.48	1.56	28	13	...	
Chapelton	15.43	3.58	18	12	7.56	
Danks Works	15.48	3.52	16	20	8.05	
Savoy House	16.48	4.56	16	20	9.18	
Crooked River	16.93	5.20	17	11	...	
Trout Hall	22.34	6.95	16	15	...	
Cave Valley	...	...	...	...	...
Means	6.65	...	...	...	...

WEST-CENTRAL DIVISION.						SOUTHERN DIVISION.					
JUNE, 1915.						JUNE, 1915.					
Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	
	Amount.	Date.					Amount.	Date.			
In.	In.			In.		In.	In.			In.	
Whitney	22.30	4.10	16	11	12.96	Morant Point L. H.	7.05	3.17	14	15	7.12
Mocho, Clarendon	16.81	4.37	16	10	...	Elliott Hill	12.62	3.26	15	21	...
Baillieston	10.69	2.18	5	18	10.06	Pleasant Hill	10.33	2.50	14	18	...
Brokenhurst	15.11	2.65	15	15	13.68	East Prospect	12.82	4.20	14	14	...
Christiana	...	...	...	...	...	Morant Bay	16.36	6.84	14	17	10.19
Chudleigh	13.61	2.07	14	15	...	Easington	18.08	6.00	14	10	10.28
Shooter's Hill	14.91	2.17	17	19	...	Bull Bay	11.85	5.00	15	4	5.41
Spitzbergen	16.41	2.14	16	15	...	Gordon Town	10.49	3.50	15	10	5.88
Kendal, Manchester	15.22	2.62	16	18	10.21	Hope Gardens	10.26	...	...	...	5.55
Marshall's Pen	10.38	1.97	15	13	8.39	King's House Gardens	10.67	...	...	...	5.16
Mandeville	14.38	2.54	15	14	10.07	Melrose	13.65	5.52	16	9	...
Carlton, Mandeville	9.24	1.75	15	16	...	Halfway Tree	13.50	5.75	15	6	4.58
The Hill	8.58	2.20	15	11	...	Lunatic Asylum	15.47	5.00	15	9	5.90
Fairfield, Manchester	11.05	2.32	4	18	9.08	Upper Elletson Road	15.92	5.40	15	9	...
Ulster Spring	17.09	3.00	9	15	5.59	Kingston P. W. Office	14.51	4.22	15	9	4.38
Freeman's Hall	10.25	2.15	3	15	...	Plumb Point L. H.	13.22	5.70	15	11	4.65
Albert Town	10.17	1.30	7	15	...	Clifton Pen	15.15	6.25	15	5	...
Lowe River	13.32	2.15	15	10	4.54	Quarantine Station	16.83	7.99	15	8	...
Troy	20.95	2.00	12	15	7.77	Spanish Town	15.64	6.52	15	8	5.24
Windsor Pen, Trel.	9.66	1.50	8	16	9.45	Hog Hole, St. Catherine	15.29	5.90	15	9	5.81
Medina	10.61	3.65	5	11	...	*Hartlands	20.90	13.40	15	7	5.35
Wallingford	9.79	4.92	5	12	...	Belmont, Guanaboa Vale	16.75	6.66	15	12	...
Balaclava Police Station	10.16	4.21	5	12	4.98	Old Harbour	12.07	4.00	15	9	7.68
Siloah	13.68	2.28	14	17	4.80	May Pen	16.78	4.54	16	8	7.66
Appleton Estate	...	...	...	...	...	Hillside	...	...	...	...	...
Maggotty	13.94	1.90	6	17	6.35	Moreland	...	...	...	...	...
Butlers	12.46	2.67	14	17	...	Money Musk	...	...	...	...	...
Dromilly Pen	8.69	1.78	10	13	...	Dunkley's, Vere	14.65	5.05	18	9	11.05
Spring Vale	10.31	2.96	8	8	11.31	Dry River	14.20	5.50	15	10	...
Mocho, Catadupa	...	...	...	...	...	Denbigh	10.68	4.28	15	6	6.01
Springfield, St. Elizabeth	10.39	1.83	4	17	...	Toll Gate	15.19	4.49	15	12	...
Chesterfield, St. James	...	...	...	...	...	Woodleigh	12.00	5.50	15	6	...
Catadupa Rly. Station	14.05	2.70	5	19	...	New Yarmouth	13.76	5.12	15	11	7.16
Kempshot	5.71	1.67	6	17	9.29	Exeter, Vere	...	...	...	...	...
Cambridge, St. James	8.59	3.00	11	16	...	Rhymesbury	12.55	5.10	15	11	10.58
Ducketts	...	...	...	...	...	Milk River	8.16	3.10	15	6	10.55
New Market, Police St.	13.49	1.72	11	15	...	Clarendon Pk. Ry. St.	...	...	...	...	...
The Bog, New Market	15.23	2.45	14	16	...	Victoria Town	16.13	4.60	15	10	8.63
Kew Park	4.99	1.46	6	14	9.56	Hog Hole, S. Manch.	16.26	3.75	15	12	...
Knockalva	5.73	1.51	6	15	...	Stone's Hope	11.43	2.81	16	13	10.18
Ramble	10.51	4.60	6	15	...	Newport, Manchester	11.31	2.75	15	18	10.62
Petersville	14.03	3.39	12	18	8.54	Great Valley, Man.	9.87	2.76	16	13	8.10
Darliston	9.05	1.35	14	19	10.38	Alligator Pond	5.45	1.80	15	8	6.00
Bluefields	18.28	3.12	12	18	...	Southfield, St. Elizabeth	9.54	4.45	16	10	...
Whithorn	12.28	2.20	14	18	9.58	Lititz	6.90	1.90	5	11	...
Water Works Pen	10.42	2.00	14	18	...	Long Hill	...	...	...	...	...
Great Valley, Han.	12.42	4.00	6	16	12.95	Torrington	6.66	2.85	16	8	4.41
Prospect Park	...	...	...	...	...	Bethlehem, St. Eliz.	10.02	3.65	16	17	5.26
Blackheath	10.13	1.76	...	15	...	Santa Cruz	11.05	2.32	10	16	6.06
Fontabelle, Westm.	7.39	1.60	13	14	11.19	Pedro Plains Police St.	4.10	2.48	16	6	4.30
Belleisle	...	...	...	...	...	Mountainside	7.94	2.16	16	10	...
Morgan's Bridge	8.72	1.95	12	16	10.61	Black River	9.80	2.72	10	15	4.02
King's Vale Police St.	12.14	2.65	22	14	11.37	Font Hill	8.55	2.10	5	12	6.08
Means	12.30	...	...	...	...	Mount Edgecombe	9.49	2.12	12	15	6.82
						Sweet River	9.75	2.70	15	14	7.37
						Windsor, Sav.-la-mar	8.92	3.15	28	14	6.72
						Orchard	9.54	3.19	28	16	...
						Sav.-la-mar	6.78	2.20	14	13	6.64
						Meylersfield	8.00	2.15	13	12	...
						Little London	11.87	4.21	5	12	...
						Retreat	10.93	3.40	14	14	7.95
						Negril Point L.H.	5.85	1.96	14	15	6.26
						Means	11.69	...	...	...	...

* See notes.

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

	JUNE.	
	1915.	Average.
	In.	In.
North-Eastern Division	16.97	10.75
Northern	6.65	5.74
West-Central	12.30	9.48
Southern	11.69	6.93
• The Island	11.90	8.22

SHOCKS OF EARTHQUAKE IN JUNE, 1915.

Date.	Standard Time (Approx.)		Intensity.	Notes: where felt, etc.
7	hr. 3	min. 30 p.m.	I	Moy Hall. B ₃ due June 7.2.
18	0	0? a.m.	II	Mt. Holstein, N.E. & S.W. 0.008
18	10	45 "	I	" N.E. & S.W. 0.005

ME due June, 17.2

Heavy rains fell over the east and middle of the Island between the 14th and 18th, due to a storm centre, at first W and then NW of Jamaica, which drew in the winds from the SE and S. On the 15th about 5 inches fell in Kingston and its neighbourhood; early in the morning of the 18th a great rain storm with thunder and lightning passed over Kingston and lower St. Andrew; and between the 14th and 18th over 13 inches fell. In the country districts some damage was done to the roads. Havana was warned on the 16th.

A remarkable squall, or series of squalls, passed along the Island on the 28th accompanied by a rapid rise in the barometer. At Yallahs at 10 a.m. it blew down trees: at Kingston at 11.45 a.m. the squall was SE, 40 miles an hour: at Biscany in St. Elizabeth at 2 p.m. trees were blown down, and the ground was thickly covered with hail.

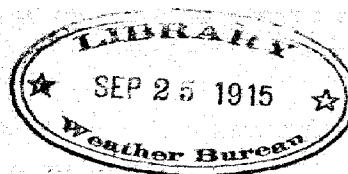
The rains at Hartlands on the 15th afford a case of a marked maximum at a particular place during heavy general rains. On the 15th between 7 a.m. and 6 p.m. 9 inches fell: and between 6 p.m. and 7 a.m. the following morning 4.40 inches fell: so that 13.40 inches were registered for the 15th. Hundreds of acres of the level land were flooded.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

No. 444.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF

JULY, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.			Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.		7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
	ft.	in.	in.	°	°	°	°	°	°	°	°	°	°	°
Morant Pt. Light House	8	29.993	29.952	83.4	85.5	87.0	80.0	7.0	88.0	3*	75.0	7	13.0	
Kingston	24	29.948	29.909	77.6	86.3	90.8	74.3	16.5	92.8	16	69.5	11	23.3	
Negril Point Light House	33	29.951	29.927	78.7	83.2	88.0	73.3	14.7	90.5	31	71.0	3	19.5	
Castleton Gardens	496	..	..	71.6	85.5	92.4	70.5	21.9	94	30	68	1*	26	
Hope Gardens†	668	29.940	29.885	76.4	85.3	90.2	70.7	19.5	94	30	67	10	27	
Stony Hill Indus. School	1,400	..	..	72.3	83.1	87.2	69.9	17.3	91	3*	68	6*	23	
Hill Gardens	4,900	25.295	25.278	64.2	68.2	..	59.4	..	75	7*	58	1*	17	

STATIONS.	Eleva- tion.	Dew Point and Hu- midity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.		3 p.m.				7 a.m.		3 p.m.		7 a.m.			3 p.m.		
	ft.	°	°	°	°	in.	miles		m.		m.	L.	M.	U.	L.	M.	U.
Morant Pt. Light House	8	76.1	78	77.3	76	2.68	266	ENE.	16	E.	16	1.4	2.4	2.2	1.8	2.1	1.5
Kingston	24	71.2	81	73.6	66	0.42	217	N.E.	4	SE.	18	0.8	1.5	3.5	1.8	2.0	3.5
Negril Point Light House†	33	70.5	76	73.8	73	7.13	178	E.	8	E.	10	0.7	0.2	5.0	3.5	5.7	0.3
Castleton Gardens	496	69.7	93	74.7	70	11.16	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens	668	69.9	82	74.3	70	2.45	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	69.4	90	70.5	65	6.60	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	59.1	84	63.7	87	2.95	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House.

Wind 11 p.m. E.N.E. 0.0

Plumb Point Light House { Average No. of Miles of wind per diem. 249
 Greatest on the 15th 398
 Least on the 2nd 175

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

JULY, 1915.

NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Manchioneal	8.15	1.40	17	16	6.46
Spring Valley, Portland	10.34	1.08	16	24	
Bath	7.14	1.80	20	21	9.66
Boston	8.02	1.00	22	17	7.34
Moore Town	17.36	2.80	22	17	20.23
Port Antonio	8.77	1.10	10	25	11.60
Fellowship	10.44	1.12	25	20	16.64
Windsor, Portland					
Johnson River Bridge	6.66	0.87	10	25	7.71
Shrewsbury	7.42	4.00	10	8	8.50
Cedar Valley, St. Thos.	5.53	1.70	10	8	4.85
Hope Bay					
Moy Hall, St. Thos.	4.88	1.55	11	13	5.53
Brooklodge	3.62	1.64	10	16	
Lennox	8.25	3.00	10	20	
Farm Hill	6.98	2.10	29	7	3.34
Hill Gardens	2.95				
Buff Bay	6.35	3.25	10	9	7.37
Vinery	9.21	6.04	18	9	
Windsor Castle, Port.	6.00	4.53	11	4	
Greenvale, Portland	4.70	3.95	10	5	
Mt. Holstein	5.15	2.48	16	15	3.35
Irish Town	0.93	0.75	16	2	1.31
Rose Hill	4.61	1.81	19	5	
Hardware Gap	5.50				4.27
Stony Hill Ind. School	6.60	1.30	16	18	5.39
Castleton Gardens	11.16				
Lawrence Tavern	7.48	2.20	12	12	5.43
Cedar Valley, Red Hills	4.24	1.13	17	10	
Carew Castle	10.67	3.39	16	16	7.08
Agualta Vale	8.86	6.40	10	10	
Water Valley	8.35	5.60	10	8	3.46
Albany, Ry. Station					
Platfield	5.57	0.98	18	16	
Richmond, St. Mary	3.56	1.76	10	8	3.68
Hampstead, St. Mary	6.91	4.42	10	12	
Troja					
Guy's Hill	6.39	2.60	22	14	
Lucky Hill	4.74	1.80	11	10	
Rio Hoe	5.65	1.48	26	13	4.29
Unity Valley	6.53	2.36	25	17	5.92
Moneague	6.26	1.58	26	14	4.73
Claremont	3.53	0.98	25	6	3.43
Albion, St. Ann	7.70	3.10	28	14	4.24
Averham Park	2.25	0.92	10	5	3.38
Means	6.84				

NORTHERN DIVISION.	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Port Maria	7.57	3.91	10	10	4.19
Ocho Rios	1.19	0.55	25	4	2.34
Bogue, Ocho Rios	4.10	1.25	6	8	
Rockfield	3.83	1.40	27	8	
Drax Hall	2.45	1.00	10	11	2.96
Liberty Hill	3.12	1.20	10	7	
St. Ann's Bay	1.86	0.68	10	12	2.96
Seville	1.95	0.98	10	8	
Richmond Estate	1.22	0.86	10	5	2.24
Llandoverly	1.40	1.15	10	3	2.03
Runaway Bay	0.50	0.50	11	1	
Brown's Town	3.91	1.26	17	7	2.68
Alexandria	3.00	0.55	21	8	
Chewmagna, St. Ann	3.63	0.67	25	12	3.07
Home Castle	4.20	1.10	22	7	2.16
Richmond Pen	5.55	1.50	25	9	2.90
Mahogany Hall	11.58	2.60	28	13	4.35
Barnstaple		3.75	28	7	
Brampton Bryan	8.90				
Bryan Castle	2.70	0.68	28	8	1.81
Braco	2.15	0.90	25	5	1.69
Arcadia	3.66	0.84	9	14	2.00
Lancaster	2.02	0.43	9	8	1.99
Harmony Hall	1.68	0.49	25	8	1.56
Vale Royal	3.08	1.00	10	9	2.87
Colchis Pen	5.12	1.40	9	14	3.18
Swanswick	4.53	1.49	9	19	
Georgia					
Long Pond					
Hyde Hall					
Steelfield					
Etingdon					
Lottery	2.65	0.85	18	8	2.33
Falmouth	2.93	1.30	25	9	1.64
Florence Hall	0.88	0.69	25	5	
Good Hope	5.89	1.05	28	15	
Unity	6.37	1.18	25	14	
Kent					
Gales Valley					
Canaan	8.92	1.60	25	14	4.18
Content					
Bellfield	3.72	1.05	25	10	
Guilbro	12.18	3.48	28	20	4.55
Glasgow	6.39	1.72	28	12	
Moor Park	6.68	2.45	28	12	2.57
Rose Hall					
Running Gut					
Cinnamon Hill					
Success					
Montego Bay	4.06	1.45	27	7	3.41
Catherine Hall	3.70	0.95	28	8	4.08
Retirement	5.05	1.46	28	15	
King Gate	7.09	1.33	31	14	5.59
Round Hill	4.55	2.50		20	3.81
Blue Hole	9.07	2.65	18	12	
Haughton Court	4.23	1.35	18	8	
Lucea	5.79	1.12	18	9	5.50
Green Island, Police St.	13.71	2.54	20	21	
CENTRAL SUB-DIVISION.					
Headworks, Rio Cobre	2.33	0.62	28	6	3.70
Linstead	15.76	4.30	24	22	5.93
Berkshire Hall	7.64	1.40	8	17	4.65
Point Hill	11.08	3.36	15	17	6.57
Marie Hill	14.04	5.98	15	10	
Worthy Park					
Croft Hill	5.02	0.84	16	11	
Chapelton	3.84	0.95	15	11	3.65
Danks Works	5.02	1.09	15	18	3.48
Savoy House	4.66	0.80	15	18	3.15
Crooked River	5.05	1.85	16	10	
Trout Hall	5.38	1.98	15	13	
Frankfield	6.96	1.50	15	10	
Cave Valley					
Means	4.97				

JULY, 1915.						JULY, 1915.					
WEST-CENTRAL DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	SOUTHERN DIVISION.	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
Whitney	In. 4.30	In. 1.70	10	9	In. 3.94	Morant Point L. H.	In. 2.68	In. 0.77	27	18	In. 3.23
Mocho, Clarendon	2.50	0.90	5	12	...	Elliott Hill	4.03	0.70	21	22	...
Baillieston	3.65	1.29	12	10	4.49	Pleasant Hill	3.74	0.69	20	23	...
Brokenhurst	3.90	0.90	12	12	6.00	East Prospect	6.39	2.22	20	22	...
Christiana	...	...	...	...	...	Morant Bay	5.29	0.94	22	23	5.80
Chudleigh	3.46	0.80	18	15	...	Easington	5.97	1.75	10	16	6.22
Shooter's Hill	6.92	3.51	15	17	...	Bull Bay	0.00	...	...	...	2.46
Spitzbergen	3.61	0.67	19	12	...	Gordon Town	1.30	0.50	10	4	2.62
Kendal, Manchester	6.56	3.85	15	8	5.45	Hope Gardens	2.45	...	...	...	...
Marshalls Pen	2.66	0.94	15	6	4.94	King's House Gardens	2.74	...	...	...	...
Mandeville	3.18	0.74	8	9	5.91	Melrose	2.64	0.72	27	8	...
Carlton, Mandeville	2.69	0.54	7	11	5.91	Halfway Tree	2.17	0.52	8	5	1.85
The Hill	1.15	0.44	12	6	...	Lunatic Asylum	0.72	0.45	10	4	1.51
Fairfield, Manchester	1.23	0.23	8	14	3.05	Upper Elletson Road	0.81	0.41	10	5	...
Ulster Spring	9.14	3.25	16	10	4.45	Kingston P. W. Office	0.42	0.31	10	3	1.81
Freeman's Hall	7.79	3.60	16	13	...	Plumb Point L. H.	1.08	0.50	10	5	1.94
Albert Town	7.27	2.50	16	13	...	Clifton Pen	1.10	0.50	27	4	...
Lowe River	9.58	2.18	10	13	3.34	Quarantine Station	1.25	0.78	10	3	...
Troy	4.90	1.00	28	9	7.11	Spanish Town	0.44	0.44	10	1	2.48
Windsor Pen, Trel.	10.22	2.95	28	19	6.65	Hog Hole, St. Catherine	0.77	0.58	10	2	2.67
Medina	3.95	1.71	27	6	...	Harlands	1.34	0.95	11	2	0.75
Wallingford	4.13	1.04	26	10	...	Belmont, Guanaboa Vale	3.87	1.66	13	11	...
Balaclava Police Station	3.99	1.20	27	12	4.71	Old Harbour	0.85	0.85	10	1	2.57
Siloah	6.40	1.65	28	12	6.86	May Pen	1.38	0.86	10	2	3.72
Appleton Estate	...	...	...	...	...	Hillside	...	...	...	...	...
Maggotty	7.19	1.42	19	11	8.15	Moreland	...	...	...	...	...
Butlers	6.48	1.29	19	14	...	Money Musk	...	...	...	...	...
Dromilly Pen	7.93	1.33	26	17	...	Dunkley's, Vere	1.27	0.80	10	3	2.32
Spring Vale	13.25	2.30	25	16	8.33	Dry River	1.24	0.88	10	3	...
Garland	...	...	...	...	...	Denbigh	1.10	1.00	17	2	2.99
Mocho, Catadupa	...	...	...	...	...	Toll Gate	1.57	0.81	10	5	...
Springfield, St. Elizabeth	4.86	0.83	24	10	...	Woodleigh	1.09	1.00	17	2	...
Chesterfield, St. James	...	...	...	...	...	New Yarmouth	1.17	0.91	10	2	2.42
Catadupa Rly. Station	15.06	3.25	24	20	...	Exeter, Vere	...	...	...	...	...
Kempshot	6.28	1.37	28	17	6.21	Rhymesbury	1.43	1.27	10	3	2.28
Cambridge, St. James	14.80	2.30	16	24	...	Milk River	...	...	...	...	...
Ducketts	...	...	...	...	...	Clarendon Pk. Ry. St.	...	...	...	...	...
New Market, Police St.	3.38	0.95	12	10	...	Victoria Town	2.10	1.45	10	3	2.61
The Bog, New Market	7.09	1.29	14	14	...	Hog Hole, S. Manch.	1.88	1.20	10	5	...
Kew Park	...	...	...	...	...	Stone's Hope	1.24	0.77	10	3	4.30
Knockalva	8.51	1.20	7	23	...	Newport, Manchester	2.10	0.54	10	14	3.73
Ramble	10.02	2.25	20	16	...	Great Valley, Man.	1.48	0.70	10	5	3.27
Petersville	4.43	1.19	20	13	7.17	Alligator Pond	1.24	0.54	10	3	2.43
Darliston	8.75	1.44	28	20	11.87	Southfield, St. Elizabeth	1.33	0.54	10	4	...
Bluefields	6.47	1.71	10	11	10.47	Lititz	0.80	0.26	12	6	...
Whithorn	14.30	2.60	9	21	10.73	Long Hill	...	...	...	...	...
Water Works Pen	15.29	2.30	24	19	...	Torrington	0.00	...	...	...	2.64
Great Valley, Han.	19.96	4.15	28	16	10.24	Bethlehem, St. Eliz.	1.87	0.65	27	6	3.04
Prospect Park	...	...	...	...	...	Santa Cruz	7.14	1.81	15	9	5.27
Blackheath	11.47	2.40	9	18	...	Pedro Plains Police St.	0.44	0.34	12	2	1.48
Fontabelle, Westm.	13.72	2.30	10	17	9.00	Mountainside	2.24	1.56	27	6	...
Belleisle	...	...	...	...	...	Black River	8.08	1.90	16	13	4.82
Morgan's Bridge	17.87	2.46	24	22	11.16	Font Hill	7.90	1.70	15	13	5.73
King's Vale Police St.	15.98	1.90	15	23	10.74	Mount Edgecombe	4.07	0.97	10	14	6.93
Means	8.02	...	...	...	...	Sweet River	12.20	1.80	13	13	7.52
						Windsor, Sav.-la-mar	13.30	2.55	9	16	6.91
						Orchard	12.83	2.96	9	19	...
						Sav.-la-mar	11.04	1.27	10	14	5.84
						Meylersfield	9.07	2.15	28	13	...
						Little London	6.74	1.56	19	15	...
						Retreat	9.67	1.43	15	15	7.65
						Negril Point L.H.	7.13	1.97	15	17	5.90
						Means	3.44	...	...	...	...

NOTES.				SHOCKS OF EARTHQUAKE IN JULY, 1915.			
COMPARATIVE TABLE OF RAINFALL.							
(Based upon the "Average" Stations only.)							
DIVISIONAL AND ISLAND RAINFALL.	JULY.			Date.	Standard Time (Approx.)		Notes: where felt, etc.
	1915.	Average.					
	In.	In.			hr.	min.	
North-Eastern Division	6.84	6.28	...	23	4	0 a.m.	I Mt. Holstein, N.E. & S.W. 0.006
Northern "	4.97	3.21	...				II Cedar Valley, N. & S.
West-Central "	8.02	7.85	...				II Morant Bay.
Southern "	3.44	3.59	...				
The Island	5.82	5.23	...				

The rains were fairly evenly distributed, but there were some marked irregularities.

At Moore Town over 17 inches fell while no rain fell at Bull Bay and at Torrington.

NOTES.

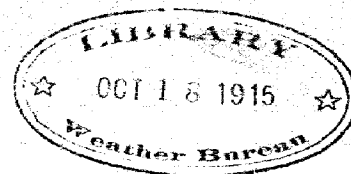
The times given for the shock on the 23rd differ considerably. At Cedar Valley three shocks were felt. B₁ was due July 22.3; and this shock seems to have stirred P, due July 20.8, or B₂ due July 20.1, or both.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

No. 445.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF
AUGUST, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.			Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.		7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	ft. 8	in. 29.922	in. 29.890		82.6	84.7	86.8	79.5	7.3	89.0	28	74.0	23	15.0
Kingston	24	29.891	29.864		77.6	85.5	90.1	74.6	15.5	93.5	3	71.6	17	21.9
Negril Point Light House	33	29.881	29.852		79.3	85.2	88.3	74.0	14.3	90.5	17	71.7	7	18.8
Castleton Gardens	496	..	..		71.6	84.3	88.1	70.7	17.4	93	8	68	2*	25
Hope Gardens†	668	29.907	29.844		75.3	84	89.4	70.6	18.8	93	8*	68	16	25
Stony Hill Indus. School	1,400	..	..		72.6	80.8	85.5	69.4	16.1	90	2	68	4*	22
Hill Gardens	4,900	25.259	25.248		64.5	67.3	71.2	59.3	11.9	76	19*	58	1*	18

STATIONS.	Elevation.	Dew Point and Humidity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.					7 a.m.	3 p.m.			7 a.m.	3 p.m.				
Morant Pt. Light House	ft. 8	75.5	79	75.5	74	in. 9.08	miles 293	N.E. 13	N.E. 12			L. 2.2	M. 1.3	U. 1.3	L. 2.2	M. 1.6	U. 1.4
Kingston	24	71.2	81	74.0	69	6.24	207	by E. ENE. 6.7	SE. 14.4			1.2	1.0	3.0	4.0	1.8	2.0
Negril Point Light House†	33	73.4	83	76.2	74	8.75	256	E. 11.5	S.W. 13.0			0.6	0.4	3.5	1.0	7.1	0.6
Castleton Gardens	496	69.8	93	73.8	72	28.01	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens	668	68.6	82	73.5	72	18.17	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	69.7	90	73.0	77	19.84	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	59	81	64	90	31.44	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Negril Point Light House.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

Wind 11 p.m. E.N.E. 9.0

Plumb Point Light House { Average No. of Miles of wind per diem 299
 Greatest on the 13th 730
 Least on the 25th 71

		AUGUST, 1915.							AUGUST, 1915.				
WEST-CENTRAL DIVISION.		Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.	SOUTHERN DIVISION.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
			Amount.	Date.						Amount.	Date.		
	In.	In.				In.		In.	In.				In.
Whitney	15.25	5.10	13	13	...	...	...	9.08	3.30	12	15	...	5.31
Mocho, Clarendon	12.75	3.90	13	10	...	...	...	10.82	3.09	13	...	...	...
Baillieston	13.92	3.72	13	14	6.45	...	...	13.28	4.11	12	18	...	...
Brokenhurst	...	...	...	...	...	...	...	12.70	3.84	31	13	...	...
Christiana	...	...	...	...	...	...	...	14.31	4.44	31	17	...	5.68
Chudleigh	28.78	7.39	13	21	...	...	...	13.21	3.96	31	10	...	6.17
Shooter's Hill	22.74	8.08	13	21	...	...	...	10.12	3.75	12	6	...	2.82
Spitzbergen	24.00	6.30	13	18	...	...	...	20.72	9.00	12	10	...	4.47
Kendal, Manchester	29.17	9.65	13	17	6.80	...	...	18.17	...	...	...	...	5.29
Marshall's Pen	18.70	5.72	13	16	8.38	...	...	12.75	...	...	...	...	5.67
Mandeville	22.40	8.54	13	15	8.03	...	...	10.85	4.32	12	7	...	...
Carlton, Mandeville.	13.74	5.85	13	14	8.03	...	...	11.52	3.50	12	8	...	3.54
The Hill	17.98	8.14	13	12	...	...	...	6.20	2.70	13	8	...	2.59
Fairfield, Manchester	19.41	8.86	13	19	5.37	...	...	8.36	3.06	12	12	...	...
Ulster Spring	19.85	5.10	13	6	6.91	...	...	6.24	1.51	13	8	...	3.88
Freeman's Hall	16.66	3.70	13	13	...	...	...	6.73	2.85	13	8	...	3.50
Albert Town	11.75	2.00	13	14	...	...	...	9.72	2.75	13	7	...	...
Lowe River	17.60	5.10	13	10	7.19	...	...	5.35	1.93	13	6	...	...
Troy	13.90	8.80	12	12	10.07	...	...	7.01	2.10	12	8	...	4.04
Windsor Pen, Trel.	11.77	4.48	13	17	8.42	...	...	7.39	2.24	12	9	...	4.53
Medina	17.80	4.95	13	16	...	...	...	5.90	1.60	13	6	...	3.21
Wallingford	17.34	6.89	15	15	...	...	...	12.82	3.85	12	9	...	...
Balaclava Police Station	16.15	5.97	13	13	7.92	...	...	4.98	1.05	12	10	...	4.66
Siloah	18.60	4.70	13	19	11.60	...	...	9.36	2.19	12	10	...	4.79
Appleton Estate	20.79	5.05	28	17	10.88	...	...	...	...	...	...	...	...
Maggotty	16.30	4.03	13	...	10.65	...	...	...	...	...	...	...	...
Butlers	15.67	5.30	13	15	...	...	...	...	...	...	...	...	...
Dromilly Pen	16.59	5.11	23	12	...	...	...	...	...	...	...	...	...
Spring Vale	23.81	7.75	23	13	11.61	...	...	...	...	...	...	...	...
Garland	...	...	...	...	...	...	...	...	...	...	...	...	...
Mocho, Catadupa	...	...	...	...	...	...	...	4.18	1.48	31	6	...	...
Springfield, St. Elizabeth	20.28	6.16	13	20	4.74	...	...	6.43	1.92	13	9	...	4.25
Chesterfield, St. James	...	...	...	...	...	...	...	5.49	1.65	13	7	...	...
Catadupa Rly. Station	...	...	...	...	...	...	...	10.00	5.00	13	8	...	4.92
Kempshot	11.07	4.73	12	15	8.51	...	...	14.24	4.29	31	15	...	...
Cambridge, St. James	...	...	...	...	...	...	...	11.90	5.50	13	8	...	...
Ducketts	...	...	...	...	...	...	...	6.25	1.76	13	10	...	3.86
New Market, Police St.	16.61	1.85	13	17	...	...	...	4.09	1.21	31	8	...	3.64
The Bog, New Market	21.91	4.00	12	23	...	...	...	9.19	2.35	31	14	...	4.52
Kew Park	23.83	3.75	23	24	11.65	...	...	5.60	2.60	31	6	...	5.26
Knockalva	18.77	5.83	13	21	...	...	...	15.04	3.82	31	16	...	...
Ramble	...	...	...	...	...	...	...	11.75	2.96	13	13	...	4.05
Petersville	20.46	6.89	13	17	10.56	...	...	16.21	5.90	13	12	...	...
Darliston	...	...	...	...	...	...	...	16.75	5.89	13	8	...	5.99
Bluefields	23.68	5.34	31	22	11.72	...	...	20.79	9.17	13	18	...	5.39
Whithorn	21.21	3.50	5	22	11.74	...	...	16.74	6.45	13	11	...	4.49
Water Works Pen	18.90	3.75	13	18	...	...	...	10.09	4.22	13	6	...	3.08
Great Valley, Han.	6.08	4.60	13	16	11.79	...	...	15.07	7.68	13	11	...	...
Prospect Park	...	...	...	...	...	...	...	11.06	3.35	13	12	...	...
Blackheath	12.18	3.90	13	14	...	...	...	...	...	...	...	...	...
Fontabelle, Westm.	17.93	5.88	31	13	11.23	...	...	19.77	8.00	12	9	...	4.55
Belleisle	...	...	...	...	...	...	...	18.73	6.83	13	...	...	4.99
Morgan's Bridge	20.95	5.87	31	18	11.70	...	...	16.71	6.07	13	18	...	8.62
King's Vale Police St.	13.97	5.00	11	19	10.76	...	...	7.31	2.40	13	10	...	2.53
						...	...	12.64	5.10	13	14	...	...
						...	...	13.44	4.50	13	19	...	5.95
						...	...	12.30	3.30	13	16	...	6.06
						...	...	16.29	2.95	31	19	...	8.19
						...	...	19.00	3.80	13	15	...	8.75
						...	...	19.17	3.83	31	16	...	7.38
						...	...	18.82	4.86	31	17	...	...
						...	...	15.28	4.52	31	15	...	7.49
						...	...	15.07	6.64	31	9	...	...
						...	...	14.22	7.37	31	9	...	...
						...	...	12.08	3.80	31	9	...	8.70
						...	...	8.75	3.17	13	15	...	6.76
Means	18.22	...	...	...	...			11.78	...	...	...	...	...

*Gauge blown away

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

DIVISIONAL AND ISLAND RAINFALL.	AUGUST.	
	1915.	Average.
	In.	In.
North-Eastern Division	18.63	7.71
Northern "	7.77	4.83
West-Central "	18.22	9.88
Southern "	11.78	5.14
The Island	14.10	6.89

The heavy rainfall was due to the hurricane which passed along the northern shores of Jamaica, on the 12th and 13th and to the depression which passed along the southern shores on the 31st.; but it was very unevenly distributed.

The upper valleys of the Morant and Yallahs Rivers south of the Blue Mt. range had between 30 to 40 inches.

The Blue Mountain Range and as far west as Linstead, the Manchester Mts., and the undulating country between Catadupa and Grange Hill had 20 to 30 inches; and the rest of the island had 10 to 20 inches, excepting the extreme northern and southern shores.

The heaviest rainfall occurred at Farm Hill and a copy of the register is here given:

Aug.	m.
7th	0.50
12th	7.50
13th	18.90
14th	4.50
16th	0.51
21st	0.10
23rd	1.75
27th	1.20
31st	5.50

Total ... 40.46

SHOCKS OF EARTHQUAKE IN AUGUST, 1915.

Date.	Standard Time (Approx.)		Intensity.	Notes: where felt, etc.
	hr.	min.		
12	5	30 p.m.	I	Scotts Hall.
		midnt.	I	Ness Castle; near Cedar Valley
13	2	0 a.m.	I	Dry Harbour.
27	2	43 p.m.	I	Kingston; lasted 1 sec.
				Moy Hall, N. & S.

NOTES.

The earthquake of the 12th and 13th were probably due to the passing hurricane. That on the 27th was from H. due 26.1.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

REPORT ON THE HURRICANE OF AUGUST 12TH AND 13TH, 1915.

The following warnings were issued by the United States Weather Bureau and were posted at all the Telegraph Stations in Jamaica:—

Aug. 10th 4 p.m. "Tropical disturbance near Dominica moving west-north-west."

Aug. 11th 4 p.m. "Severe tropical disturbance at 8 a.m. apparently central near Island of St. Croix, moving west-north-west at 18 or 20 miles an hour. Will probably cross San Domingo or Haiti reaching south-east of Cuba Thursday night or Friday."

At 7 a.m. Aug. 12th Mr. J. F. Brennan issued the following local warning telegram:—

"Hurricane apparently south of Haiti now following a more westerly track in the direction approaching east of Jamaica. Every precaution advised."

And at 2 p.m. and at 4.30 p.m. similar warnings were received from the U.S. Weather Bureau and were circulated in Jamaica.

But before these last two warnings were issued the east end of Jamaica was swept by a northerly gale as the centre of the cyclone moved on its course, which was nearly parallel to the north-eastern shores of Jamaica, but 15 or 20 miles further north. The general direction of its course is shown in chart (1)*, where the dates mark the approximate positions of the centre at noon; and from Dominica to Jamaica the centre moved along its course at the rate of 19 miles an hour; it subsequently moved at a slower rate passing near Cayman Brac at 11 a.m. 13th, and reaching Galveston about mid-day August 16th.

Charts (2) and (3) show its course near Jamaica, and its position at 11 p.m. August 12th and at 5 a.m. August 13th respectively. The arrows fly with the wind, and the number of feathers on an arrow indicate its strength according to the Beaufort scale.

It was therefore the north side of the Island which suffered most, and the sea driven ashore by the northerly winds swept away everything within its reach: wharves, houses, roads, bridges, and even a part of the railway track, all of course on or near the beach; and as all the towns and villages from Manchioneal to Falmouth suffered to a greater or less degree, the total damage was very great although the wind barely reached hurricane force, namely, No. 12 on the Beaufort Scale.

The following account of the storm as experienced in Port Maria was given in "The Daily Gleaner."

"This town has been visited by one of the most disastrous blows and washouts that have yet been chronicled. All during Thursday warnings of an approaching storm were being given out by the genial and obliging Post Office Staff, and all necessary precautions that could have been taken by the shipping, were resorted to.

As the evening advanced and twilight approached there was the unmistakable veering of the wind and the orange-coloured clouds coming from a north-westerly direction which gave certainty to the belief that we were in for a terrible experience. The wind commenced to freshen up and some lively gusts came rushing by as the heralds of destruction. Faster and faster did the clouds move, now north-east, now north-west and by the time night had closed in on us, all minds were made up that we were in for either a storm or a hurricane.

The sea began to be boisterous, and occasionally there would be seen a big wave which when it burst would come rushing into the streets. Fiercer and fiercer blew the winds and more boisterous became the sea, and by nine o'clock the greater section of the town was in a state of pandemonium. All during the night "calls for help" could be heard and it can truthfully be said that, but for the vigilance and energy of the police and the willingness of the men of the town to help when and wherever needed, the loss of life would have been appalling. The Rev. James rendered yeoman service in rescuing the unfortunates and rang the bell of the Baptist Chapel late into the night as a warning that he had placed the sacred edifice at the disposal of those who needed help. The Town Hall and Court House too had to be resorted to and these buildings were packed to their utmost capacity. The more fortunate residents—those whose homes were not threatened by the fury of the waves—also threw their doors open to help their neighbours. The Presbyterian Kirk had also to be resorted to by those persons living in that vicinity. The sea in the vicinity of Hotel Manning rose on several occasions during the night to fully the height of the balcony of the hotel and a really terrible night it was. Houses were to be seen being carried along the Main Street like canoes, and at day break, Friday, a sorry state of things was witnessed. Houses from the sea shore were to be seen fully a quarter of a mile away in the Frontier banana walk, and the scene from Mr. Wilson's drug store along Main Street to Kerr & Co's. wharf was one continuous mass of wreckage. All the wharves and wharf houses and sheds have been completely destroyed, and between 250 and 300 persons rendered homeless. The surf and whale boats were all to be seen wholly or partially smashed on the opposite side of the street, and many of them formed breakwaters, which greatly assisted in saving some of the building which escaped destruction."

* This plate was prepared at the Government Printing Office from a drawing by Mr. J. F. Brennan.

And at Annotto Bay things were just as bad. The following account is taken from "The Daily Chronicle."

"A few warnings from the Weather Bureau on Thursday, and a sullen sky in the direction of the sea and heavy roaring billows were the only hints that Annotto Bay—a busy and flourishing seaport of St. Mary—had of a visitation which left death and destruction in its wake—altering a portion of the town entirely.

The wind gradually began to come up in the morning, and fishermen and boat owners took the precaution of having their boats moored to places of apparent safety. At 5.30 o'clock in the evening the sea commenced to run high and simultaneously the velocity of the wind increased by degrees. All the residents feared a hurricane, but little did they think that it would be so destructive. The wind started from the north and continued so for the first portion of the night until 1.30 to 2 o'clock when it veered to the southeast. Then it was at its highest. It was then, with the help of the sea, damage was done, and to the poorer classes, wharf labourers and so on—damage almost irreparable. The sea, leaving its limits, inundated the lower portion of the town known as Bottom Bay and played havoc in that section. The people, on observing the rapid advance of the tide, which was coming with alarming force, hurriedly began to vacate their homes, and had they not done so in quick time, there would undoubtedly have been a heavy death list. With a broad expanse of sea before, a swamp behind and a river to the west, their plight was unenviable. With ever-increasing fury the billows lashed the beach and in a few minutes had mounted over; then the water crossed over a lagoon running parallel, washed over the retaining wall and was soon in the main road. It was a terrifying sight to see buildings being thrown against each other by the sea and with all their contents smashed and flung into the swamp behind, while their occupants up to a few minutes before, were now refugees fleeing to where they knew not. A large number of the houses cannot be located, while the site on which several stood is at present a waste of sand. The road through the entire sea-swept area is unrecognizable, while what was once a lagoon now forms a portion of the beach.

The homeless took shelter for the night in the Baptist Chapel, Police Station, United Fruit Co.'s store, on the store piazzas, and under whatever building that could afford protection from wind, storm and sea."

In many respects this storm was very similar to that of Aug. 11th 1903, of which the writer gave a full account with charts in the U.S. Monthly Weather Review for Sept., 1905. The centre of that storm passed through the Island from near the Morant Point Light House to Montego Bay, and on to the Grand Cayman Island, and Yucatan; it moved at much the same rate as the one under consideration, and the following remark made with reference to that storm is also applicable to this one of 1915:—"In many low-lying places the wind drove the sea ashore; and there is reason to suppose that had the centre been moving slowly instead of at the high rate of 20 miles an hour, there would have been appalling loss of life from the invading sea."

With regard to the damage done in the Island generally, I cannot do better than quote the remarks of His Excellency the Governor as President of the Agricultural Society at a meeting of the Board on August 19th as reported by "The Daily Gleaner."

"The President said perhaps he might be expected to say something on this occasion with regard to the recent storm. Information had no doubt been in the possession of all the members of the Board of Management of the fact that in most of the parishes between 80 and 90 per cent. of the bananas were stated to be down. There were certain small areas, however, where the loss was not so great, but they might take it that in the majority of places in the island the loss of the present banana crop was between 80 and 90 per cent. As regards coconuts the loss that had been sustained would not be more than one per cent. As regards cocoa he understood that very little damage had been done, and that damage was principally due to banana trees being blown down on the cocoa trees. With respect to root crops—yams, etc.—he understood that in some districts there had been considerable damage, and this was due to the poles being blown down. But this had not been general. In other districts he had been informed that root crops had not suffered to any great extent. With regard to buildings, with the exception of a few cases, hardly any damage had been done and nothing compared with that caused by the last two hurricanes—the one in 1903 and the other in 1912. As regard the sea coast, from Manchioneal right around to Falmouth, very serious damage had been done. In Manchioneal, the storm had damaged the United Fruit Company's wharf, and the damage was principally confined to smaller buildings—eight in number. In Port Antonio a certain amount of damage had also been done to smaller houses, but no great damage to larger buildings. When they left Port Antonio around the sea coast to Annotto Bay, they found that a number of larger houses had been destroyed, in addition to many smaller buildings, as also the wharf premises. In the smaller towns, such as Hope Bay, St. Margaret's Bay, there had been considerable damage done, and the destruction of smaller houses. Some of the houses had been lifted from their foundation by the sea. The damage at Buff Bay was more than what it had been in either St. Margaret's Bay or Hope Bay. At the latter place the damage was not only to smaller houses but also to larger ones. In some cases the larger houses had been lifted by the sea right across the road and those along the sea coast were carried away. There was also much damage to the wharves at Buff Bay. At Annotto Bay considerable damage had also been done. The United Fruit Company's wharf was also damaged and several of the smaller houses. Some of them were lifted from their foundation and carried inland. In Port Maria there was much damage along the sea coast. All the wharves were destroyed and the incoming of the sea had done damage to a number of houses. The damage, generally, was considerable. Further along the coast, embracing Oracabessa and Ocho Rios considerable damage had also been done. At St. Ann's Bay the wharves and wharf houses were damaged, and from this point right on to Falmouth much damage was done. The houses built on the sea coasts were either destroyed

or lifted up and carried some distance from their original position. In Trelawny, principally Falmouth, much damage had also been occasioned to wharves and wharf houses. At Montego Bay, except for some slight damage to the United Fruit Company's wharf, and the Government Pier, the damage was comparatively small.

With regard to the roads, the most serious damage done was in respect to those roads along the sea coast. Starting from Port Antonio right along the roads along the sea coast had been swept away, and this was the case right around the coast to a point beyond Falmouth. The Public Works Department had been busy making a track for buggies to go over, but he was afraid that it would be some time before motor traffic could go over the roads, but it was hoped to get communication as soon as possible. A great deal of damage to the roads had been due to an enormous quantity of sand washing over.

With regard to the railway (continued His Excellency), the track outside of Buff Bay, for about 200 yards had been completely destroyed, and it would take a month and possibly six weeks before the line could be put in order."

OBSERVATIONS.

In the following tables of observations the mercurial barometers at Morant, Kingston, Kempshot, and Negril, have been reduced to all the standards of temperature, level, gravity, etc. The aneroid barometers at Port Antonio and Woodlawn were reduced by comparing their readings with those at Kingston and Kempshot when the storm was yet distant. And all bar. readings were further corrected for diurnal variation. The velocity of the wind is for the most part estimated in miles per hour.

It may here be mentioned that many other aneroid readings and notes have been sent me; but the aneroids were all more or less out of order, and the notes not sufficiently precise; for these tables of observation are of course intended to supply materials for future study.

We may here give the Beaufort scale (WR. No. 411, p. 12):—

Scale No.	Description.	Miles per hour.	Scale No.	Description.	Miles per hour.
0	Calm	0	8	Fresh gale	42
1	Light air	2	9	Strong "	50
2	Light breeze	5	10	Whole "	59
3	Gentle "	10	11	Storm	68
4	Moderate "	15	12	Hurricane above	75; say 80
5	Fresh "	21	(14	Great hurricane	" 100
6	Strong "	27	(16	Violent "	" 120
7	Moderate gale	35			

MORANT POINT LIGHTHOUSE.—Mr. Chas. Durrant.

August. 1915.	Bar. (Stand.)	Wind.	Notes.
hr. m.	in.	miles pr. hr.	
12th 7 a.m.	29.681	N 40	Rain squalls; Fr. stratus and nimb., N. Upper clouds, Alt. stratus; motion not observed.
8 a.m.	.670	" "	
10 a.m.	.656	" "	
11 a.m.	.653	" "	
Noon	.637	" "	
1.30 p.m.	.610	" "	
3 p.m.	.576	" "	Violent gusts and heavy rain.
4.30 p.m.	.541	" "	
8 p.m.	.395	NW 80	
10.15 a.m.	.183	W "	
11.30 p.m.	.196	SW 60	Ditto do
13th 1 a.m.	.361	" 40	Gusts and rain not so heavy.
7 a.m.	.749	SSE 30	Continuous rain.
3 p.m.	.835	SE 20	Rain ceased.
14th 7 a.m.	.839	" 10	Fine
3 p.m.	29.845	ESE "	Fine.

As the Morant Point bar. invariably reads 0.026 higher than the Kingston bar., the Morant Point readings were all diminished by 0.026 to reduce to Kingston.

By plotting the curve of pressure it will be found that the lowest bar. was 29.149 at 10.45 p.m.

Rainfall 7 a.m. 12th to 8 a.m. 13th, 3.30 inches.

PORT ANTONIO—Mr. W. L. Mudo.

Aneroid readings (reduced).

	hr. m.	in.		hr. m.	in.
Aug. 12th	7 a.m.	29.68	Aug. 13th	12.10 a.m.	28.98
	2 p.m.	.62		12.23 "	28.99
	5.20 "	.60		12.35 "	29.02
	7.55 "	.52		12.50 "	.04
	8.20 "	.44		1.10 "	.08
	9.15 "	.36		1.25 "	.11
	10.5 "	.29		1.40 "	.15
	10.50 "	.18		5.55 "	.44
	11.18 "	.08		6.40 "	.46
	11.30 "	29.03		7 "	.48
	11.40 "	28.98		9 "	.64
	11.52 "	28.96		11.25 "	29.73

The wind blew from the NW, W, S, and reached SE at 6 a.m. on the 13th. It did not reach full hurricane force. The rainfall was 3.90 inches.

Theoretically the lowest bar. should have been 28.93 instead of 28.96; but this difference is small and the readings are valuable.

KINGSTON.—Mr. J. F. Brennan.

1915—August.		Bar. (Stand.)	Wind.		Notes.
	hr. m.	in.			
10th	7 a.m.	29.958	N	6	1 Cum. E; 5 cir.-haze S.W.
	3 p.m.	.949	SE	14	2 cum. E; 1 cir. W
11th	7 a.m.	.924	N	5	Clear
	3 p.m.	.861	SE	8	2 cum. E
	7 p.m.	.822	SE	6	Clear
	11 p.m.	.798	NE	3	Clear
12th	3.30 a.m.	.726	NE	5	1 cum. NW slow
	7 a.m.	.686	N	12	3 str. NE; 4 cum. N; 1 cir. SE
	11 a.m.	.665	N	18	2 str. NE; 1 cum. NNE; 6 cir. and cir. str. SE
	3 p.m.	.623	N	12	10 nimb. NE. Rain in afternoon
	7 p.m.	.539	NW	18	Heavy rain squall
	9 p.m.	.438	NW	14	10 nimb. Rain
	10 p.m.	.393	NW	14	10 nimb. Rain
	11 p.m.	.336	NW	22	Light rain
13th	Midnt.	.347	W	30	Showery
	1 a.m.	.362	SW	36	Light showers
	2 a.m.	.389	SW	40	"
	3 a.m.	.451	SW	24	"
	4 a.m.	.501	S	24	"
	5 a.m.	.542	SE	30	Nimb. SE; light showers
	6 a.m.	.562	"	26	"
	7 a.m.	.588	"	38	"
	11 a.m.	.766	"	36	"
	3 p.m.	.835	"	24	
14th	7 a.m.	.834	"	12	
	3 p.m.	29.878	"	16	

By plotting the curve of pressure it will be found that the lowest bar was 29.327 at 11.23 p.m., 12th. A note should be made here as to the work done by the Weather Service in Kingston, represented by Mr. Brennan, on Aug. 12th:—

Telegrams sent, Washington, Havana, Santiago	No.
" inland	9
" received	4
Circular hurricane warnings issued	9
Telephone calls	3
Personal calls	112
Letters, notices, &c.	25
	15
	177

Complaints were afterwards made by several persons who were unable to "call up" Mr. Brennan as his telephone was in constant use.

WOODLAWN, Mandeville.—Prof. W. H. Pickering.

1915—August.	Aneroid (reduced).	Wind.	Notes.
11th hr. m.	in.		
7.10 p.m.	29.85		
8.50 p.m.	.85		
11 p.m.	.82		
12th 6.45 a.m.	.76	ENE 10	No rain.
7.45 a.m.	.75		
11 a.m.	.76	NNE 5	
12.40 p.m.	.75	NNE	
2.20 p.m.	.63		
4.30 p.m.	.63		
5.50 p.m.	.63	Calm	
7.5 p.m.	.59	NNE 10	Brilliant yellow sunset.
11.8 p.m.	.48	NNW	Brief gusts: occasional rain.
13th 7.20 a.m.	.49	SSW	2.02 in. rain since 7 a.m., 12th.
9.45 a.m.	.57	SSW 25	
10.50 a.m.	.61	ESE 20	Heavy rain.
11.50 a.m.	.64	SE 35	"
1.15 p.m.	.65	ESE 35	"
3.20 p.m.	.71		"
4.30 p.m.	.78		
6.30 p.m.	.83	SE 10	
9.15 p.m.	.81	S 6	
14th 9.18 a.m.	.85	SSE 5	7.60 in rain 7 a.m. 13th, to 7 a.m. 14th.
12.30 p.m.	29.89	S 3	

The lowest bar. was not observed: theoretically it was 29.40 at 3 a.m., 13th.

KEMPSHOT.—Mr. Maxwell Hall.

August, 1915.	Bar. (Stand.)	Wind.	- Clouds.	Notes.
12th 7 a.m.	29.788	N 15	10 str. N	Min. temp. 72° 2
9 a.m.	.777	N 15	10 fr. str. N	Blue sky between clouds.
10 a.m.	.749	NNE 12	2 str. NNE	Thin cir. veil over blue sky.
11 a.m.	.754	NNE 12	2 fr. cu. NE	SE motion along cir. stripes.
			1 cir. SE	
			2 str. NE	Between 7 and 10 a.m., 55 miles of wind passed.
2 p.m.	.721	Var. 5	4 cum. NE	The cir-str. was advancing from over the eastern half of the sky.
3 p.m.	.712	Var. 5	6 cir-str. NNE	Max. temp. 81° 8.
4 p.m.	.701	NE 3	4 fr. str. E	
			8 cum. NE	Fine. Between 10 a.m. and 5 p.m. 71 miles of wind passed.
5 p.m.	.699	NW 10	10 cir-str. E	Some cum. N.E across the sheet of cir-str. Stripes lie SE and NW.
7 p.m.	.673	W 5	2 str. NE	Clearing sky.
9 p.m.	.618	W 10	cir-stripes NE	
			5 cum. NE	Between 5 p.m. and midnight 67 miles of wind passed.
11 p.m.	.570	W to N 15	10 str. ? N	Rain. Wind and clouds more together.

KEMPSHOT.—Mr. Maxwell Hall, *contd.*

August, 1915.	Bar. (Stand.)	Notes.		
13th 1 a.m.	.523	NW.	Rain squalls.	Wind, rain and clouds all together.
2 a.m.	.468	NW.	Rain squalls.	Gusts 40 to 60 miles an hour. Temp. 76°.
3 a.m.	.407	NW	do	do do
4 a.m.	.346	NW	do	do do
4.30	.308	W	do	do do
5.0	.302	SW	do	do do
5.10	.287	SSW	do	do do
5.20	.286	S	do	do do
5.30	.286	S	do	do do
5.40	.291	S	do	do do
6 a.m.	.312	S	do	do do
7 a.m.	.384	SW	Heavy squalls	Gusts 60 to 70 miles an hour.
8 a.m.	.439	SW	Rain squalls.	Gusts 40 to 60 miles an hour. Between midnight and 10 a.m. 342 miles of wind had passed.
9 a.m.	.502	S	Rain squalls.	Gusts 40 to 60 miles an hour.
10 a.m.	.539	S	do	do do
11 a.m.	.582	SSE	do	do do
Noon	.583	SE	Heavy squalls.	Gusts 60 to 70 miles an hour.
1 p.m.	.615	SE	Rain squalls.	
3 p.m.	.684	SE	Heavy squalls.	Between 10 a.m. and 5 p.m., 210 miles of wind had passed.
7 p.m.	29.740	SE	Clearing	

Rainfall 7 a.m. 12th, to 7 a.m. 13th, 4.73; 7 a.m. 13th, to 7 a.m. 14th, 0.74.

When the rain collected in the gauge was measured in the morning of the 13th it was found to be milky white; so again in the morning of the 14th, but less so. As the geological formation in the neighbourhood, and of the Island generally, is white limestone, the dust in the air is chiefly limestone, and the rain gauge becomes incrustated with lime in the course of years. But there were no local circumstances to account for the amount of lime in the rain during the hurricane; the rain driven by the wind through the closed jalousies even left a white stain on the floors.

The temperature of the air before and during the storm was about 5° above the average, so that the air felt remarkably warm. During the hurricane in Kingston Aug. 18th and 19th, 1880, the temperature of the air was similarly about 6° above the average.

The attempt of the sky to clear at 7 p.m. on the 12th, as usual after the heat of the day, is very remarkable.

The Robinson anemometer nearly failed again. After the storm it was found that the vertical cylinder which carries the upper bearing for the vertical axis to which the revolving arms are attached was nearly unscrewed out of the top of the box containing the recording apparatus; the cylinder screws in one way (the usual screw rotation), but the arms revolve the other; consequently lateral pressure against the bearing had produced such friction as to unscrew the cylinder; and yet I am sure the gusts were not over 70 miles an hour. The instrument is regularly oiled and looked after. I have suggested elsewhere that the two motions of rotation should be the same, so that the arms screw on their support tighter.

GREAT VALLEY, Hanover.—Mr. E. E. Melville.

Aug. 12th. 7.30 p.m. Wind NE, light and gusty.
9.40 p.m. Wind NE, hurricane gusts; wind backing to N.
13th. 2 a.m. Wind NW, gale in irregular gusts.
5 a.m. Wind W do
6.20 a.m. Wind SW do
7.30 a.m. Wind S do
8.40 a.m. Wind SW do

And the wind alternated between S and SW from this time until 9 p.m. when it gradually died away.

From 8.40 a.m. onwards the winds must surely have been affected by local surroundings, by hills or valleys. It was SE at Mount Eagle and Fontabelle in Westmoreland not far from Great Valley, and indeed in the afternoon it was SE at every other place in the Island.

at night, with a blue light. **NORTH POINT LIGHTHOUSE.** Mr. J. S. Brown, keeper, was on duty at (8) 10 p.m. on the 12th and 13th inst. The light was observed at 10 p.m. on the 12th and 13th inst. The light was observed at 10 p.m. on the 12th and 13th inst.

1915—August.		Bar. (Stand.)	Wind.		Clouds: Notes.
		in.			
12th	7 a.m.	29.786	N	16	Blue sky.
	11 a.m.	.753	N	20	10 cir-str. Scud from N rapid.
	3 p.m.	.704	N	15	10 cir-str. Scud from N: also between 1 and 7 p.m. from SE
	7 p.m.	.659	N	13	do do do
	9 p.m.	.617	N	12	10 clouds
13th	11 p.m.	.623	N	8	10 clouds. Rain squalls.
	1 a.m.		N	20	10 nimb. Rain squalls.
	2 a.m.	.553	N	30	do do
	3 a.m.	.514	NW	30	do do
	4 a.m.	.491	NW	40	do do
	5 a.m.	.437	NW	60	do do
	6 a.m.	.418	NW	60	do do
	7 a.m.	.406	NW	60	do do
	8 a.m.	.433	NW	60	do do
	9 a.m.	.466	SW	60	do do
	10 a.m.	.509	SW	60	do do
	11 a.m.	.538	S	60	do do
	1 p.m.	.570	S	66	do do
	3 p.m.	.631	S	60	do do
	5 p.m.	.656	SE	60	do do
14th	7 p.m.		SE	60	do do
	9 p.m.	.705	SE	60	do do
	11 p.m.	.711	SE	60	do do
	1 a.m.	.752	SE	60	do do
	3 a.m.	.760	SE	34	10 str.
	5 a.m.	.763	SE	32	10 cir-str
	7 a.m.	.774	SE	40	10 cir-str. Wind 7 a.m., 13th to 7 a.m. 14th., 1165 miles
	9 a.m.	.781	SE	30	10 cum SE. Patches of blue sky.
	11 a.m.	29.810	SE	20	do do do

The wind velocities given are the max. at times of observation. Rain 7 a.m. 12th to 7 a.m. 13th, 3.17: 7 a.m. 13th to 7 a.m. 14th, 0.26. The scud from SE between 1 and 7 p.m. was below the scud from N: it was probably due to the usual sea-breeze.

RESULTS.

(1) The first thing which attracts our attention in looking through these observations is the north-easterly drift of the lower and middle clouds on the 12th, more particularly at Kempshot, which is 1,800 feet above sea-level and exposed on all sides. The centre was then to the E of Kempshot, and it might have been supposed that the low clouds would have been drawn in from the NW; but from 10 a.m. to 9 p.m. stratus, or cumulus, or both, drifted from the NE; and at the latter hour the centre was only 150 miles away.*

But if we refer to the Report of the 1903 hurricane referred to above, and also to the Report of the 1886 hurricane (W.R. No. 69), exactly the same circumstance occurred; the winds at the west end of Jamaica before the gales sprang up were E.N.E. or NE. In 1880 and 1912 the winds were confused between 2 or 3 different centres; but there are now three hurricanes for future study; and at present we can only say that in front of a storm advancing from the E, the wind over Jamaica is north-easterly. Several places reported north-easterly winds in the newspapers: Port Maria, Harkers Hall, etc., but generally speaking, sufficient care was not taken, and the hours were not noted.

(2) We have next to consider the upper clouds. A thin cirrus veil was drawn over the sky at Kempshot at 10 a.m. when the centre was about 375 miles away; and the cirro-stratus appeared 4 hours afterwards when the centre was about 300 miles away. But at 10 a.m. certain cirrus-stripes were observed lying SE and NW, and the motion of a point on a stripe was from the SE. Later on at 5 p.m. the motion of a point was E. So that it may be said that the motion of a point on a stripe that day at Kempshot was ESE, or directly from the centre.

* At midnight the wind and clouds were again from NE when the centre was hardly 100 miles away.

(3) In some of my former articles I have called attention to the constancy and regularity during its progress of the isobars round a cyclonic centre as shown by a simple equation:—The fall of pressure below mean at any place varies inversely as the square root of the distance of the centre from that place. When the distance is small, it will be found that the distance has to be measured from the nearest edge of the calm area at the centre, and that other consideration prevent trouble on arriving at the edge.

The same constancy and regularity applies to this cyclone; and this principle allows us to obtain a number of "readings of the barometer" scattered over the Island from those taken by the standard barometers at Morant Point, Kingston, Kempshot and Negril Point; by means of which we can draw the isobars.

Draw lines through these four places parallel to the course of the centre of the cyclone; take the position of the centre at midnight as the position and time to which the isobars are referred; and draw a line southward from the centre at right angles to its course. This perpendicular line reached Kempshot for instance at 5.25 a.m. on the 13th, the time of nearest approach to that place; so that at 11 p.m. on the 12th the perpendicular was 6 hours 25 minutes away in time, or 122 miles in space along the parallel line through Kempshot. The bar. at Kempshot at 11 p.m. was 29.57; and reversing the direction, 29.57 was the bar at midnight at a place 122 miles to the west of the perpendicular line. And so on for other hours at Kempshot, and for the other places.

Now charts (2) and (3) were taken from chart (1) with sufficient accuracy for a general description; but this method of test, as well as the mathematical equation referred to above, requires that the course should be slightly altered, so that it makes an angle of 21° instead of 17° with the parallels of latitude, and drawn through the given position of the centre at 11 p.m. And if from the amended position of the centre at midnight we describe circles they will represent the isobars more accurately than could have been expected.

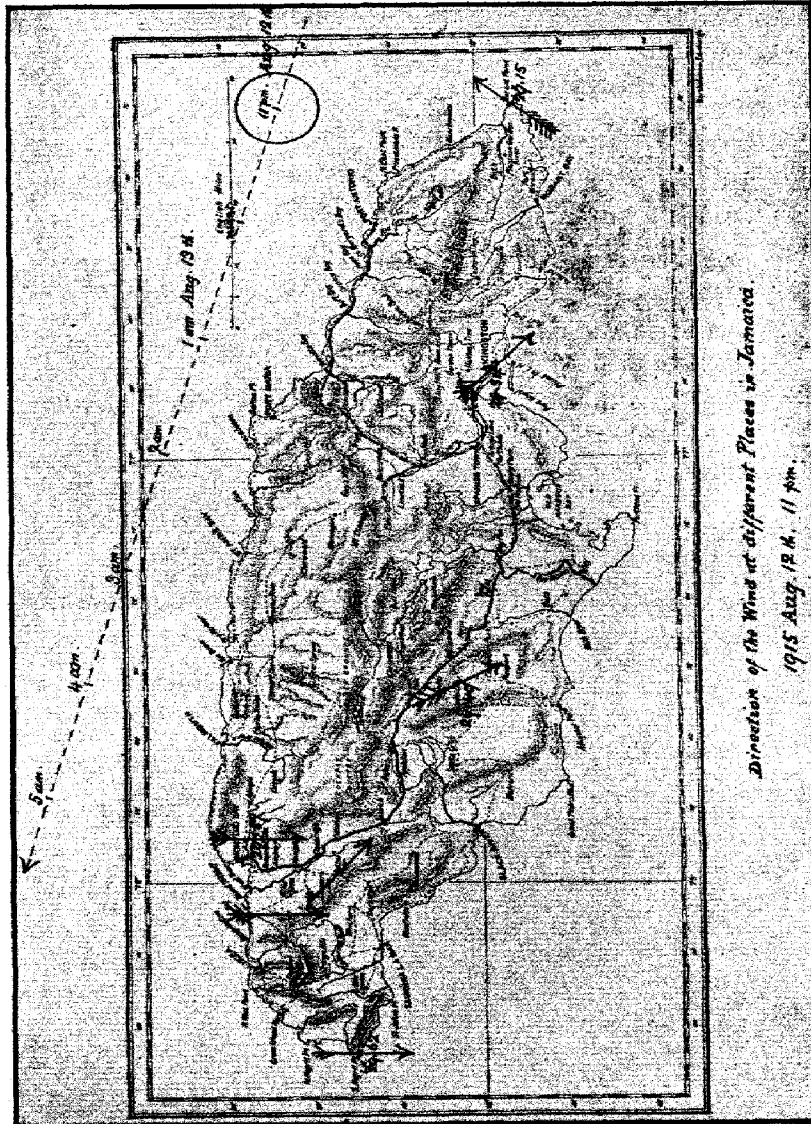
Isobar.				Radius in miles.
29.20	..	..	..	32
29.30	..	..	..	39
29.40	..	..	..	58
29.50	..	..	..	92
29.60	..	..	..	139

That is to say the isobars thus drawn inter-thread all the various bar. readings obtained as described above, with reference however to the advancing left hand quadrant of the cyclone; the gradients will no doubt be somewhat different in the following quadrant.

It is proposed to give the map of the isobars and a few deductions in the next Weather Report.

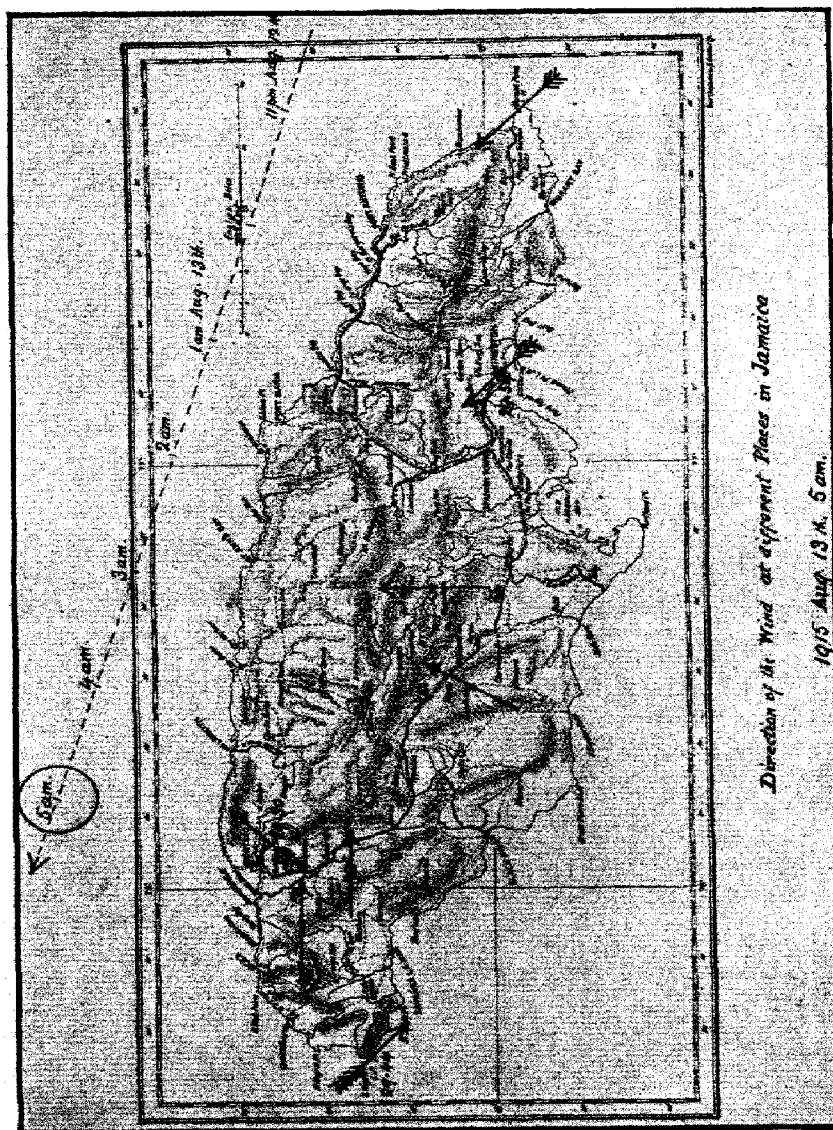
MAXWELL HALL
Government Meteorologist.

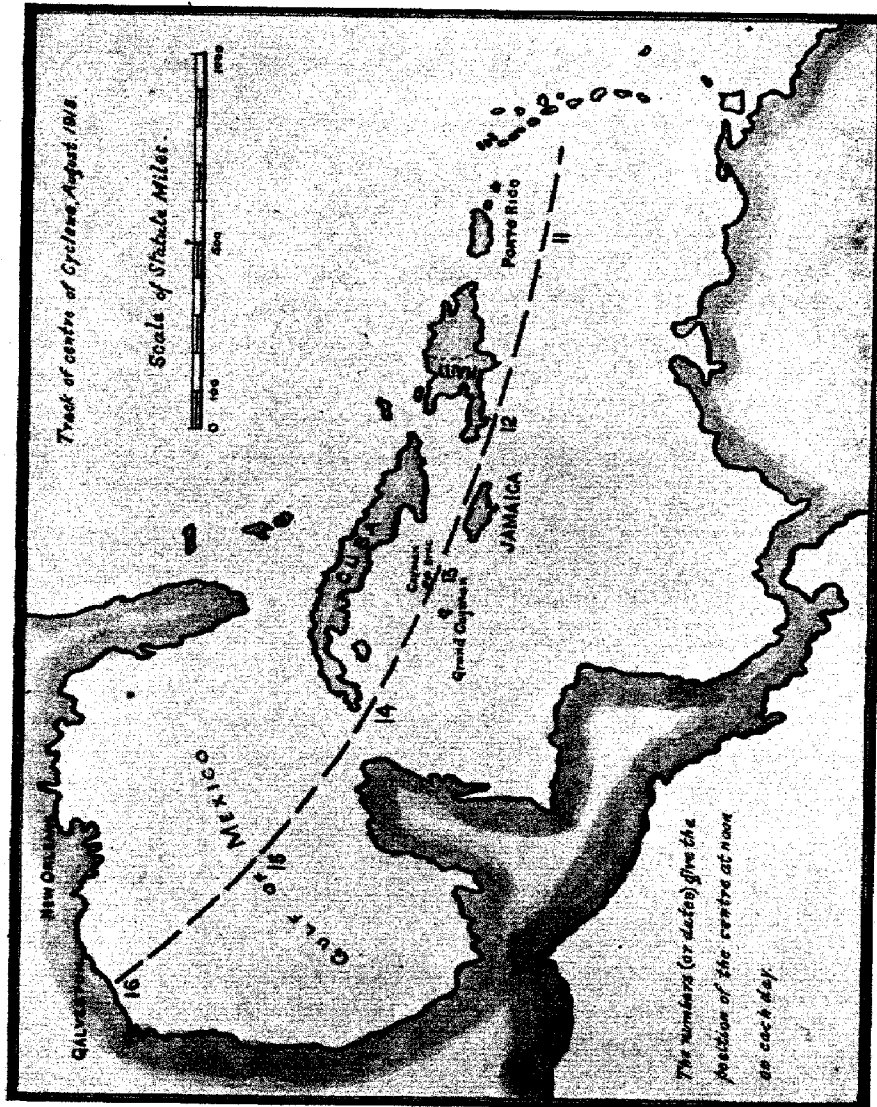
Sept. 13th, 1915.



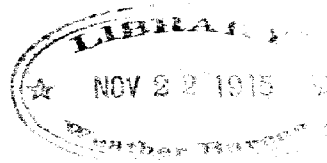
Direction of the Wind at different Places in Jamaica.

1915 Aug 12 at 11 pm.





No. 447.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF
SEPTEMBER, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
Morant Pt. Light House	8	29.890	29.850	82.6	84.3	86.6	77.6	9.0	88.0	6*	74.0	1*	14.0
Kingston	24	29.861	29.828	77.1	84.6	88.7	71.2	18.5	93.0	23	71.6	2	21.4
Negril Point Light House	33	29.841	29.807	78.5	84.6	87.3	74.2	13.1	91.5	24	70.6	6	20.9
Castleton Gardens	496	..	..	71.2	81.5	86.9	70.3	16.6	93	20	68	7*	27
Hope Gardens†	668	29.883	29.809	76.2	83.4	83.9	70.6	18.3	93	21	68	5	25
Stony Hill Indus. School	1,400	..	..	73.4	80.4	83.6	69.4	14.2	89	14	68	3*	21
Hill Gardens	4,900	25.246	25.213	64.3	67.0	70.7	58.6	12.1	76	9	57	1*	19

STATIONS.	Elevation.	Dew Point and Humidity.		Rainfall.	Wind per diem.	Wind: direction from and miles per hour.		Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
Morant Pt. Light House	8	75.8	80	76.5	78	9.42	264	NE	12	E	13	2.4	1.5
Kingston	24	72.5	86	74.4	71	11.90	173	NE	6	SE	9	1.6	1.6
Negril Point Light House†	33	72.9	83	75.3	74	8.67	243	E	11	E	13	2.6	0.3
Castleton Gardens	496	69.2	93	72.5	77	26.23	..	..	..	..	..	..	..
Hope Gardens	668	70.5	85	72.8	72	13.41	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	70.3	90	73.1	78	17.87	..	..	..	..	..	..	..
Hill Gardens	4,900	59.8	87	63.9	90	21.45	..	..	..	..	..	..	..

* and on other days.

† Negril Point Light House.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

Wind 11 p.m.

E 8.0

Plumb Point Light House { Average No. of Miles of wind per diem 211
 { Greatest on the 25th 602
 { Least on the 22nd 71

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

		SEPT., 1915.										
NORTH-EASTERN DIVISION.		Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.						
			Amount.	Date.								
		In.	In.			In.						
Manchioneal	17.87	4.00	25	14	10.88		10.50	2.95	26	16	3.44	
Spring Valley, Portland	16.36	2.60	25	18			9.20	2.70	26	10	3.31	
Bath	18.27	3.00	24	21	12.03		Arcadia	12.47	2.95	26	12	4.02
Boston	18.06	2.60	30	19	11.04		Lancaster	12.82	3.12	2	13	3.89
Moore Town	37.00	10.00	4	14	14.21		Harmony Hall	10.02	2.75	2	11	3.64
Port Antonio	31.16	10.47	4	16	10.43		Vale Royal	12.67	3.80	23	11	4.64
Fellowship	33.38	10.50	4	21	12.93		Colchis Pen	8.24	1.63	15	14	5.23
Windsor, Portland							Swanswick	12.80	2.65	26	16	
Johnson River Bridge	23.09	3.09	24	22	11.48		Georgia	10.70	2.30	23	13	
Shrewsbury	21.82	4.70	24	11			Long Pond	10.20	3.10	26	13	
Cedar Valley, St. Thos.	30.13	8.00	4	14	13.40		Hyde Hall	11.04	3.00	23	14	5.20
Hope Bay	17.20	5.20	25	17			Steelfield	11.34	2.80	23	11	
Moy Hall, St. Thos.	33.99	9.10	4	22	10.92		Etingdon					
Brooklodge	34.31	8.08	4	21			Lottory	13.25	2.75	26	13	4.38
Lennox	16.90	3.75	24	17			Falmouth	6.87	2.23	26	14	3.46
Farm Hill	36.68	6.60	26	11	10.00		Florence Hall	10.15	2.08	25	10	
Hill Gardens	24.46						Good Hope	12.23	2.90	26	17	
Buff Bay	13.95	3.60	14	16	4.94		Unity	13.67	2.75	26	15	
Vinery	11.06	2.25	14	15			Kent	13.05	3.00	26	13	
Windsor Castle, Port.	13.25	5.00	14	12			Gales Valley					
Greenvale, Portland	17.03	3.70	24	18			Canaan	11.83	2.20	26	21	7.96
Mt. Holstein	23.06	9.59	23	22	9.02		Content	8.48	2.08	26	14	
Irish Town	10.60	2.38	25	8	9.40		Bellfield	9.67	2.70	26	13	
Rose Hill	26.58	3.40	17	18			Gullsbro	14.96	2.02	28	19	7.91
Hardware Gap	19.50				9.02		Glasgow	10.79	3.00	24	11	
Stony Hill Ind. School	17.87	3.12	26	19	9.82		Moor Park	7.80	1.45	26	13	6.13
Castleton Gardens	26.23						Rose Hall	6.20	1.65	25	7	
Lawrence Tavern	16.90	3.50	23	17	9.53		Running Gut	5.80	1.70	25	8	
Cedar Valley, Red Hills	12.97	4.27	4	11			Cinnamon Hill	6.18	1.58	26	9	
Carew Castle	16.57	3.28	23	17	12.93		Success	6.62	2.10	26	9	
Agualta Vale	8.89	1.80	2	12			Montego Bay	11.12	2.29	26	15	6.91
Water Valley	10.55	1.80	24	13	5.32		Catherine Hall					
Albany, Ry. Station	9.19	1.35	25	11			Retirement	16.41	3.52	14	16	
Platfield	11.67	2.17	24	15			King Gate	20.10	4.02	18	12	7.04
Richmond, St. Mary	12.11	2.12	24	16	5.59		Round Hill					
Hampstead, St. Mary	22.44	4.11	19	16			Blue Hole	15.69	4.36	14	17	
Troja							Houghton Court	8.46	2.00	14	14	
Guy's Hill	17.03	2.94	23	14			Lincea	9.98	1.65	14	12	7.68
Lucky Hill	15.38	2.60	24	14			Green Island, Police St.	10.17	2.40	4	13	
Rio Hoe	12.81	2.17	23	16	6.18		CENTRAL SUB-DIVISION.					
Unity Valley	16.96	5.12	26	20	8.20		Headworks, Rio Cobre	12.92	3.96	26	16	6.54
Moneague	13.63	3.50	26	15	7.14		Linstead	18.69	4.20	26	13	8.01
Claremont	13.92	3.82	26	12	5.31		Berkshire Hall	15.02	3.00	24	13	5.30
Albion, St. Ann	20.22	4.10	26	17	6.98		Point Hill	23.72	5.16	26	17	11.54
Averham Park	15.56	4.62	26	15	4.83		Marlie Hill	17.92	5.41	26	14	
Mean	20.59						Worthy Park	12.25	2.32	25	12	7.56
							Croft Hill	18.22	4.22	26	13	
							Chapelton	22.34	9.50	26	17	7.91
							Danks Works	21.31	8.90	26	17	9.37
							Savoy House	22.35	10.14	26	18	9.35
							Crooked River	22.00	8.05	26	10	
							Trout Hall	23.15	8.50	26	16	
							Frankfield	11.16	1.50	25	16	
							Cave Valley	16.20	4.00	26	13	
							Mean	13.20				

WEST-CENTRAL DIVISION.	SEPT., 1915.					SOUTHERN DIVISION.	SEPT., 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
	In.	In.			In.		In.			In.	
Whitney	24.80	8.55	27	12	11.19	Morant Point L. H.	9.42	2.00	30	20	7.31
Mocho, Clarendon	18.87	8.76	26	8	...	Elliott Hill	12.86	1.88	26	23	...
Baillieston	17.77	6.00	25	17	9.70	Pleasant Hill	13.24	2.40	30	18	...
Brokenhurst	31.65	8.70	25	18	9.33	East Prospect	10.77	1.86	29	22	...
Christiana	17.89	5.62	26	18	9.97	Morant Bay	12.36	2.87	24	18	8.41
Chudleigh	22.15	7.15	26	16	...	Easington	21.13	4.75	4	15	8.73
Shooter's Hill	23.27	7.65	26	15	...	Bull Bay	16.50	5.70	4	8	4.70
Spitzbergen	20.22	6.50	26	16	...	Gordon Town	16.26	4.15	26	8	8.57
Kendal, Manchester	27.21	7.94	26	13	9.53	Hope Gardens	13.44	...	...	...	...
Marshalls Pen	27.97	8.72	25	16	8.79	King's House Gardens	12.45	...	...	...	...
Mandeville	34.57	11.06	25	21	10.04	Melrose	12.04	3.77	27	11	...
Carlton, Mandeville	22.86	11.06	25	21	10.04	Halfway Tree	12.11	3.80	26	9	5.09
The Hill	...	...	...	...	...	Lunatic Asylum	11.25	4.49	4	10	4.72
Fairfield, Manchester	22.90	7.75	25	25	7.80	Upper Elletson Road	12.77	5.26	4	13	...
Ulster Spring	18.97	4.50	26	14	8.44	Kingston P. W. Office	11.99	6.45	4	9	4.18
Freeman's Hall	15.10	5.00	26	15	...	Plumb Point L. H.	17.08	9.45	4	11	3.81
Albert Town	18.73	5.50	26	14	...	Clifton Pen	13.08	4.70	4	8	...
Lowe River	23.70	6.15	26	14	10.21	Quarantine Station	10.38	6.00	4	9	...
Troy	15.82	5.00	26	15	13.77	Spanish Town	10.43	2.88	26	14	5.30
Windsor Pen, Trel.	...	...	...	...	...	Hog Hole, St. Catherine	12.03	4.30	26	14	6.33
Medina	18.18	6.15	23	15	...	Hartlands	11.33	2.55	26	9	4.39
Wallingford	20.89	5.30	26	21	...	Belmont, Guanaboa Vale	16.50	3.35	26	22	...
Balaclava Police Station	18.93	4.68	26	19	10.31	Old Harbour	10.44	1.90	26	13	6.45
Siloah	18.70	3.10	26	21	13.46	May Pen	15.34	7.00	26	12	7.89
Appleton Estate	15.39	3.50	26	22	11.50	Hillside	...	...	...	...	...
Maggotty	16.42	4.10	25	20	11.84	Moreland	...	...	...	...	...
Butlers	13.72	2.85	25	23	...	Money Musk	15.32	4.82	25	13	5.48
Dromilly Pen	13.27	2.58	26	14	...	Dunkley's, Vere	15.94	4.21	26	13	6.52
Spring Vale	15.44	2.52	26	14	10.61	Dry River	16.01	3.68	25	14	...
Garland	...	...	...	...	...	Denbigh	18.00	7.00	26	9	7.99
Mocho, Catadupa	...	...	...	...	...	Toll Gate	22.77	6.86	26	14	...
Springfield, St. Elizabeth	15.18	3.13	26	23	...	Woodleigh	19.15	7.50	26	9	...
Chesterfield, St. James	...	...	...	...	...	New Yarmouth	18.26	4.58	25	13	5.73
Catadupa Rly. Station	17.30	3.60	26	21	...	Exeter, Vere	...	...	...	...	...
Kempshot	10.00	2.91	14	17	9.64	Rhymesbury	17.94	4.23	26	18	5.96
Cambridge, St. James	14.03	2.10	26	20	...	Milk River	20.10	4.30	26	8	6.33
Ducketts	...	...	...	...	...	Clarendon Pk. Ry. St.	...	...	...	...	...
New Market, Police St.	13.55	1.85	26	19	...	Victoria Town	...	...	...	...	...
The Bog, New Market	16.73	3.80	25	23	...	Hog Hole, S. Manch.	28.51	9.30	25	16	...
Kew Park	12.07	2.39	25	17	12.06	Stone's Hope	26.83	8.02	25	14	8.30
Knockalva	13.92	2.15	26	20	...	Newport, Manchester	...	...	...	...	...
Ramble	...	...	...	...	...	Great Valley, Man.	20.92	5.55	28	18	6.63
Petersville	14.03	3.87	25	21	9.83	Alligator Pond	...	...	...	...	...
Darliston	17.07	4.21	26	28	13.79	Southfield, St. Elizabeth	22.59	6.45	25	16	...
Bluefields	17.97	4.62	26	15	12.34	Lititz	12.61	3.90	28	18	...
Whithorn	11.38	2.44	26	16	12.06	Long Hill	...	...	...	...	...
Water Works Pen	10.80	2.30	26	13	...	Torrington	21.35	5.00	25	16	6.42
Great Valley, Han.	13.83	2.15	25	16	12.27	Bethlehem, St. Eliz.	17.00	4.64	26	18	6.78
Prospect Park	...	...	...	...	...	Santa Cruz	...	2.82	26	19	...
Blackheath	12.73	3.00	31	13	...	Pedro Plains Police St.	14.62	5.22	25	13	4.90
Fontabelle, Westm.	...	...	...	...	...	Mountainside	14.45	3.00	25	15	...
Belleisle	...	...	...	...	...	Black River	11.70	3.05	26	13	5.75
Morgan's Bridge	9.79	1.63	26	17	12.18	Font Hill	11.25	3.70	25	12	7.11
King's Vale Police St.	6.55	1.05	15	15	11.44	Mount Edgecombe	11.31	2.65	25	16	8.39
Mean	18.43	...	...	...	...	Sweet River	...	...	...	...	...
						Windsor, Sav.-la-mar	8.34	2.05	26	11	7.26
						Orchard	7.65	1.78	26	11	...
						Sav.-la-mar	8.03	1.75	24	9	6.96
						Meylersfield	7.35	1.92	1	7	...
						Little London	8.68	3.00	25	8	...
						Retreat	10.79	2.60	25	10	8.28
						Negril Point L.H.	8.67	2.75	25	12	7.51
						Mean	14.52	...	...	...	...

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

DIVISIONAL AND ISLAND RAINFALL.	SEPT.	
	1915.	Average.
	In.	In.
North-Eastern Division	20.59	8.68
Northern	13.20	5.70
West-Central	18.43	10.78
Southern	14.52	6.49
The Island	16.68	7.91

Heavy rains fell over the eastern part of the Island on the 4th: in Kingston as much as 6.40 fell on that day, and at places in Portland over 10 inches fell.

Again on the 25th and 26th heavy rains fell which were due to a cyclone which passed along the southern shores.

At Moore Town and Farm Hill, from the two causes 37.00 and 36.68 inches fell respectively; but the rains were distributed very irregularly, and at other places only 7 or 8 inches fell. Further notes will be found in the following account of the Storm.

SHOCKS OF EARTHQUAKE IN SEPT., 1915.

Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, etc.
11th	6.37 a.m.	III or IV II	Kingston; 0.06, S 56° E; 5 sec. Mt. Holstein: .012 SE and NW: sound. Moy Hall: SW and NE: 5 sec. Linstead: Race Course. Port Antonio, E and W? a few sec. Windsor Pen: Trel. Tremors lasting several secs. Unity Valley: Two slight successive shocks. Springfield, St. Elizabeth. Petersville, Westmoreland.
"	7.20 "	I	Hagley Gap.
"	11.28 "	I	Kingston: 0.002: 10 sec.
"	...	I	Moy Hall.
18	8.0 "	I	Siloah.
27	8.22 p.m.	II	Morant Bay: sharp and hard: 1 sec.

NOTES.

The shock on the 11th at 6.37 a.m. was due to an epicentre south of the parish of St. Thomas which has given off a good many shocks last year and this year; the greatest of these was on August 3rd, 1914, when it was very severely felt at Morant Bay,—No. V on the Earthquake scale. The period of this centre is 17.6 days, but its position is not yet known.

The other shocks on the 11th were of course "after-shocks."

On the 18th the shock came from the epicentre S near Siloah, which was due September 18th, early in the morning.

On the 27th, there was another shock from the new epicentre, not far from Yallahs; this epicentre we shall distinguish in the future by the letter Y.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

THE STORM OF SEPTEMBER 24TH AND 25TH, 1915.

Early in the afternoon of Sept. 23rd the following telegram was received from the U. S. Weather Bureau and was posted at all the telegraph stations in Jamaica:—

"Some indications of a tropical disturbance in latitude 15°, longitude 67°," a point on the chart 250 miles south of the west end of Porto Rico.

On the 24th the following was received:—"12.30 p.m. Pressure low over western Caribbean sea. Indications of disturbance south-east of Kingston: its intensity not yet known."

The following were the observations at 7 a.m. on the 24th:—

Station.	Bar.	Wind.	Notes.
Morant Pt. ...	29.770	ENE 20	6 cirrif. clouds E; fine; heavy sea.
Kingston ...	.771	N 3	5 str-nimb. NE; rain; thunderstorm.
Kempshot ...	.771	ENE 10	10 str. ENE: drizzle.
Negril Pt. ...	.762	NE 7	Blue sky.

At Kingston the wind from the N was merely the usual land-breeze; the cyclonic wind was NE as shown by the clouds. At Kempshot and Negril the wind was as usual when a depression is advancing from the east. (See WR. No. 445, p. 11.) And what small indications there were would place a depression at a considerable distance south of Jamaica.

After this the bar. rose: at Kingston the usual SE breeze set in at 11 a.m.: at 1 p.m. the bar. there was 29.811; and the following were the observations at 3 p.m. on the 24th:—

Station.	Bar.	Wind.	Notes.
Morant Pt. ...	29.794	ENE 20?	
Kingston ...	.783	W 6	8 Str. NE; rain squalls during day.
Kempshot ...	.814	E 15	10 str. cum. E fast.
Negril Pt. ...	.788	SE 15	10 nimb.

The W wind at Kingston was probably a mere flaw from the mountains; and both Kingston and Morant Pt. began to feel the influence of the depression to the SE, while Kempshot and Negril Pt. showed that the depression to the S had passed. And in accordance with general instructions wired from Kempshot, Havana was warned, and the following circular was posted in Jamaica about 4 p.m.:—

"Disturbance developed to south-east of Jamaica and passed along south of the island in a westerly direction."

This was true; but it so happened that it was not the disturbance south of Porto Rico and SE of Jamaica referred to by the cable notices of the 23rd and 24th; it was a "secondary," or a minor depression attached to the advancing larger depression.

Consequently during the night of the 24th the bar. fell over Jamaica, and squalls of wind and rain increased in force as the larger depression passed along the south of Jamaica on an almost westerly course, with its centre at least 150 miles south of the island.

At Negril Pt. the wind was ENE that night 35 to 40 miles an hour with heavier squalls at times: at 11 p.m. the bar. was 29.739.

At Kingston there was not much wind, and the lower clouds were from the E: at 11 p.m. the bar. was 29.745: ENE. 15.

At Kempshot there were rain squalls from the N, NE. and ENE, from 10 to 15 miles an hour: at 3 a.m. on the 25th the bar. was 29.754 ENE. 15.

At Negril Pt. there were rain squalls from the SE; and at 3 a.m. on the 25th the bar. was 29.736 with wind SSE, 30 miles an hour. And the wind remained SE until some time after 4 a.m. when it was N and NE. The "secondary" which had passed must have surely developed to have kept the wind so long in the SE.

The following were the observations at 7 a.m. on the 25th:—

Station.	Bar.	Wind.	Notes.
Morant Pt. ...	29.740	E 30	Wind less squally: showers.
Kingston ...	.698	E 15	10 nimb. E.
Kempshot ...	.680	E 30	Stormy.
Negril Pt. ...	.670	N 12	Rain squalls.

After this the bar. rose; and as the 7 a.m. readings were lowest, or nearly so, at all the stations, we cannot do better than assume that the centre was then south of the island and about 150 miles distant.

During the night there were several heavy gusts; and about 3 a.m. a remarkably heavy one was noticed at Kempshot, Montego Bay, Lucea, and Negril Pt.; and no doubt it was such gusts which blew down trees and broke the telegraph wires at several places, so that at 7 a.m. on the 25th it was found that telegraphic communication between Kingston and Kempshot was interrupted.

In consequence Mr. Brennan issued a notice in Kingston at 9 a.m. for the eastern part of Jamaica, to the effect that the storm had passed but that brisk easterly winds might be expected to continue, and at 9.30 a.m. the following notice was issued from Kempshot for the western part:—"The centre of the cyclone passed 150 miles south of Kempshot at six this morning on a westerly course. The weather will soon clear."

But as a matter of fact it did not clear until the morning of the 27th: the word "moderate" would have been better.

The cyclone was fully developed at this time; the S.S. "Almirante" met the storm on the night in question on her voyage from Colon to Kingston, and was somewhat damaged. The cyclone continued to move on the usual course, south-west of the Cayman Islands, over Cape San Antonio, and on to New Orleans; it struck that city at 6 p.m. on the 29th, and caused great loss of life, and great damage to houses and property.

The centre was south of Jamaica at about 7 a.m. on the 25th, as already said; and measuring from its position at 8 a.m. on the 23rd, it must have moved at the rate of 16 miles an hour along its course; but from Jamaica to New Orleans its rate was reduced to 12 miles an hour.

As the banana fields in Jamaica had been greatly damaged by the hurricane of August 12th and 13th, this storm added but slightly to the total damage; of course the wind was stronger on the south side of the island, but on the north-eastern coast the wind blew the sea ashore, and impeded the repairs which were being made to the roads.

A good deal of damage was done by the rivers Minho and Thomas in Clarendon; on the 24th and 25th September the cyclonic rains had filled those rivers full, and on the night of the 26th there was a severe thunderstorm in upper Clarendon which lasted for three hours, when 7 inches of rain fell. This of course brought down the rivers in full flood; and besides the damage to cultivated lands on their banks there was some loss of life.

M. H.

No. 448.

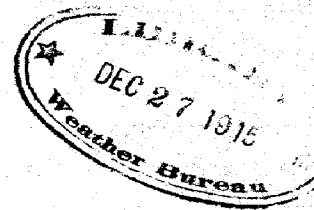


JAMAICA

WEATHER REPORT

FOR THE MONTH OF

OCTOBER, 1915.



The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extreme Temperature.				
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.	Range
	ft.	in.	in.	°	°	°	°	°	°		°		°
Morant Pt. Light House	8	29.894	29.837	82.6	84.0	86.4	77.9	8.5	88.5	3	71.5	20	17.0
Kingston	24	29.867	29.814	75.8	83.9	88.7	73.6	15.1	92.5	15	70.8	20	21.7
Negril Point Light House	33	29.855	29.802	77.7	84.3	87.6	73.6	14.0	89.9	26	69.6	4	20.3
Castleton Gardens	496	..	..	71.2	81.8	88.3	70.2	18.1	92	1*	66	20	26
Hope Gardens†	668	29.887	29.798	75.5	83.5	89	70	19	93	3	67	19	26
Stony Hill Indus. School	1,400	..	..	73.0	78.8	83.4	68.7	14.7	83	15*	68	1*	20
Hill Gardens	4,900	25.248	25.222	65	67.2	71.7	58.9	12.8	76	4	57	28*	19

STATIONS.	Elevation.	Dew Point and Humidity.				Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.		3 p.m.				7 a.m.		3 p.m.		7 a.m.			3 p.m.		
	ft.	°		°		in	miles		m.		m.	L.	M.	U.	L.	M.	U.
Morant Pt. Light House	8	74.8	78	75.2	75	16.75	219	NE	11	NE by N	7.3	3.7	0.6	1.6	3.5	0.9	1.9
Kingston	24	72.4	89	74.3	84	12.78	126	NNE	5.0	SE	8.4	1.2	0.7	3.6	2.8	1.7	3.4
Negril Point Light House†	33	73.4	86	76.3	77	5.03	177	ENE	7.4	NNW	10.2	1.8	0.0	5.4	2.9	4.8	0.9
Castleton Gardens	496	69.4	93	75.4	79	20.73	..	..	..	..	..	..	..	..	..	..	..
Hope Gardens	668	68.1	76	73.9	72	10.84	..	..	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	70.8	92	74.8	87	20.48	..	..	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	60.1	84	64.1	90	12.39	..	..	..	..	..	..	..	..	..	..	..

* and on other days.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

‡ Negril Point Light House.

Wind 11 p.m.

E.N.E. 7.0

Plumb Point Light House { Average No. of Miles of wind per diem 129
 Greatest on the 31st 226
 Least on the 25th 68

WEST-CENTRAL DIVISION.	OCT., 1915.					SOUTHERN DIVISION.	OCT., 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
In.	In.			In.	In.	In.			In.		
Whitney	12.55	9.35	31	4	...	Morant Point L. H.	16.75	4.62	31	19	11.71
Mocho, Clarendon	10.33	3.00	31	12	10.70	Elliott Hill	17.35	4.49	30	23	...
Baillieston	5.90	3.45	31	9	14.94	Pleasant Hill	21.21	6.80	31	21	...
Brokenhurst	6.11	3.50	31	19	12.84	East Prospect	23.45	7.89	31	17	...
Christiana	7.07	2.80	31	11	...	Morant Bay	19.75	7.45	31	13	14.22
Chudleigh	9.83	3.90	31	16	...	Easington	17.66	6.50	31	14	14.22
Shooter's Hill	7.93	3.05	31	13	...	Bull Bay	10.15	6.10	31	4	10.26
Spitzbergen	9.87	5.05	31	11	14.96	Gordon Town	8.92	3.50	29	7	14.15
Kendal, Manchester	5.96	1.62	31	11	12.81	Hope Gardens	10.84	...	...	...	...
Marshall's Pen	8.03	2.82	31	12	16.56	King's House Gardens	12.50	...	...	...	...
Mandeville	4.99	2.40	31	11	16.56	Melrose	8.01	2.40	30	13	...
Carlton, Mandeville	5.00	3.18	31	6	...	Halfway Tree	12.63	4.30	31	7	9.90
The Hill	4.66	1.76	31	16	10.60	Lunatic Asylum	10.47	3.30	31	14	7.93
Fairfield, Manchester	16.30	2.20	23	13	10.19	Upper Elletson Road	11.18	4.06	31	15	...
Ulater Spring	7.90	2.45	10	9	...	Kingston P. W. Office	12.78	4.94	31	11	8.15
Freeman's Hall	5.91	1.35	31	9	...	Plumb Point L. H.	15.15	6.30	29	10	7.67
Albert Town	6.52	3.50	31	11	12.46	Clifton Pen	11.88	6.20	31	7	...
Lowe River	8.10	1.20	31	10	16.50	Quarantine Station	10.86	4.30	31	6	...
Troy	13.26	4.05	28	15	9.49	Spanish Town	10.73	5.55	31	10	9.59
Windsor Pen, Trel.	8.40	2.33	29	13	...	Hog Hole, St. Catherine	10.43	5.87	31	10	10.09
Medina	5.33	1.50	31	20	...	Hartlands	9.60	6.30	31	7	7.78
Wallingford	5.35	1.35	31	11	13.38	Belmont, Guanaboa Vale	16.10	9.60	31	14	...
Balacava Police Station	10.10	1.85	31	15	15.10	Old Harbour	8.95	2.70	31	7	11.07
Siloah	8.60	1.82	31	17	14.04	May Pen	11.23	7.88	31	7	11.57
Appleton Estate	10.92	2.50	9	15	15.30	Hillside	...	...	...	...	...
Maggotty	12.90	2.23	9	18	...	Moreland	...	...	...	...	...
Butlers	10.33	2.33	10	16	...	Money Musk	...	...	...	...	...
Dromilly Pen	13.35	2.60	31	13	10.42	Dunkley's, Vere	10.31	7.45	31	9	7.01
Spring Vale	...	...	...	...	...	Dry River "	9.67	7.80	31	6	...
Farland	15.05	2.95	8	17	...	Denbigh	10.50	8.00	31	4	10.11
Mocho, Catadupa	11.24	1.80	31	18	9.48	Toll Gate	14.81	10.25	31	9	...
Springfield, St. Elizabeth	...	...	...	...	...	Woodleigh	10.00	7.50	31	4	...
Chesterfield, St. James	12.07	1.53	8	17	...	New Yarmouth	8.95	6.94	31	8	9.20
Catadupa Ry. Station	7.40	1.18	26	15	9.60	Exeter, Vere	6.76	3.28	31	8	6.26
Kempshot	11.87	1.80	12	23	...	Rhymesbury	9.67	7.49	31	10	8.49
Cambridge, St. James	...	...	...	...	...	Milk River	21.00	10.60	31	8	7.56
Ducketts	10.84	1.70	31	15	...	Clarendon Pk. Ry. St.	...	...	...	...	...
New Market, Police St.	12.83	1.65	31	19	...	Victoria Town	19.03	15.61	31	7	11.55
The Bog, New Market	7.71	1.53	26	13	11.68	Hog Hole, S. Manch.	14.19	9.40	31	11	...
Kew Park	15.53	2.10	31	22	...	Stone's Hope	10.00	6.26	31	10	13.35
Knockalva	...	...	...	...	...	Newport, Manchester	9.24	5.05	31	15	12.26
Ramble	7.59	2.38	31	15	11.33	Great Valley, Man.	8.45	4.88	31	13	11.37
Petersville	17.06	2.30	15	25	15.71	Alligator Pond	8.09	5.00	31	7	8.77
Darliston	8.30	1.16	31	17	12.34	Southfield, St. Elizabeth	5.30	2.72	31	10	...
Bluefields	12.43	2.50	31	22	11.93	Lititz	4.58	2.54	31	12	...
Whithorn	11.85	3.40	23	22	...	Long Hill	...	...	...	...	...
Water Works Pen	9.40	3.10	23	9	12.17	Torrington	4.46	1.40	31	9	11.26
Great Valley, Han.	...	...	...	...	...	Bethlehem, St. Eliz.	6.55	1.56	31	12	11.86
Prospect Park	5.16	1.72	28	7	...	Santa Cruz	6.15	1.79	21	11	12.01
Blackheath	7.79	2.04	31	8	10.44	Pedro Plains Police St.	2.26	1.17	31	4	6.06
Fontabelle, Westm.	...	...	...	...	...	Mountainside	6.61	1.50	10	9	...
Belleisle	9.76	1.95	31	7	12.94	Black River	7.48	2.26	21	16	8.74
Morgan's Bridge	7.89	1.17	28	16	10.25	Font Hill	7.35	2.80	31	13	9.95
King's Vale Police St.	...	...	...	...	...	Mount Edgecombe	6.43	2.22	31	16	10.05
Mean	9.13	...	...	...	...	Sweet River	12.15	2.60	21	14	10.06
						Windsor, Sav.-la-mar	5.40	1.95	31	11	8.40
						Orchard	6.11	1.83	31	14	...
						Sav.-la-mar	6.50	2.50	31	11	8.99
						Meylersfield	4.46	1.77	31	6	...
						Little London	5.23	1.95	31	7	...
						Retreat	4.21	2.00	31	4	10.96
						Negril Point L.H	5.03	1.72	31	12	8.37
						Mean	10.03	...	...	...	...

NOTES.			SHOCKS OF EARTHQUAKE IN OCT., 1915.			
COMPARATIVE TABLE OF RAINFALL.						
(Based upon the "Average" Stations only.)						
DIVISIONAL AND ISLAND RAINFALL.	OCT.		Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, etc.
	1915.	Average.				
	In.	In.				
North-Eastern Division	... 15.65	13.22	18	5.48 a.m.	I	Melrose, Halfway Tree, N.W. & S.E. duration 3 secs. Mt. Holstein; NW. & S.E. 0.015.
Northern	... 8.11	7.46				
West-Central	... 9.13	12.02				
Southern	... 10.03	10.20	25	noon	I	Mt. Holstein.
The Island	... 10.73	10.74				

Very heavy rains fell on the 31st, bringing the rainfall up to the average. These rains were due to a depression which developed to the W. of Jamaica, but the heaviest falls were between the middle and the southern shores of the Island. At Victoria Town over 15 inches fell on that day and in Upper Clarendon many places had 11 inches or more.

NOTES.
The shock on the 18th was probably from B2 due Oct., 1915.

NOTE ON THE HURRICANE OF AUG. 12TH. 1915.

Prof. Scherer of Port-au-Prince has kindly given valuable information as to this hurricane in the south of Haiti. The lowest bar. at Port-au-Prince was 29.535 (cor. for Diurn. var.) at 9.30 a.m. on the 12th with the wind E. About 50 miles south of this Town a French steamer met the storm at sea, and passed through a calm area in the midst of a terrible hurricane where the bar. fell to 28.74. At the town of Aux Cayes there was another French steamer, and a series of rather rough bar. readings were taken on board apparently in Greenwich time: the lowest bar. 29.29, and the direction of the NE wind, seem to place the centre south of that Town at about 1 p.m. local time. And at Cape Tiburon the wind was N at 3.30 p.m. and SSE or S at 4 p.m.: so that the centre passed very near the Cape at 3.45 p.m. At the Cape the storm blew down nearly all the houses: and at Aux Cayes the damage was also great, greater than that done by any hurricane since 1875.

The fall of the bar. at the centre is in accordance with the isobars as given in the Report on this hurricane, p. 9, and the Monthly Weather Review referred to; and about the same fall was experienced when the hurricane passed over Galveston on the 16th. And these notes also show that the centre was moving north-west on the morning of the 12th, and that after 1 p.m. it moved nearly west; that is to say, from a little south of Cape Tiburon to a little north of Port Antonio, all in accordance with the deductions made from the readings of the bar. at the Morant Point Light House.

M. H.
19.11.15.

It is requested that for the future all communications to the Weather Office may be addressed to the Montego Bay P.O.

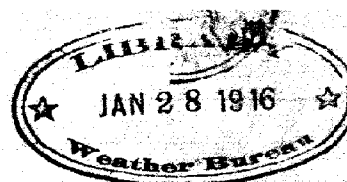
Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

No. 449.



JAMAICA



WEATHER REPORT

FOR THE MONTH OF
NOVEMBER, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extreme Temperature.			
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.
	ft.	in.	in.	°	°	°	°	°	°		°	
Morant Pt. Light House	8	29.949	29.895	80.3	81.7	83.7	76.7	7.0	86.0	3*	70.0	1
Kingston	24	29.916	29.873	72.8	82.1	85.5	71.3	14.2	88.7	23	68.5	9
Negril Point Light House	33	29.909	29.859	75.3	83.3	86.1	72.7	13.4	89.3	23	68.0	21
Castleton Gardens	496	..	..	70.4	79.5	83.7	69.5	14.2	90	17*	66	17*
Hope Gardens†	668	29.940	29.858	72.2	82.5	86.5	67.9	18.6	92	20*	66	7*
Stony Hill Indus. School	1,400	..	..	70.2	78.2	81.8	67.7	14.1	88	18*	64	26*
Hill Gardens	4,900	25.267	25.229	61.7	64.1	67.9	56.2	11.7	73	17*	53	26*

STATIONS.	Elevation.	Dew Point and Humidity.		Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
	ft.	°	°	in	miles					L.	M.	U.	L.	M.	U.
Morant Pt. Light House	8	72.6	77	73.0	75	10.12	361	NE	18	NE	15	4.8	0.8	1.0	3.3
Kingston	24	69.7	80	72.6	73	2.37	93	N by E	3.8	SE	5.0	2.4	0.8	2.2	4.6
Negril Point Light House‡	33	70.5	83	72.6	70	2.05	233	E by N	9.3	ENE	14.6	3.3	1.0	2.7	3.6
Castleton Gardens	496	68.4	94	72.4	77	41.83	..	..	..	..	..	..	..	..	..
Hope Gardens	668	68.2	87	71.8	69	5.96	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	67.4	90	74.4	83	8.77	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	68.2	87	61.1	90	27.72	..	..	..	..	..	..	..	..	..

* and on other days.

‡ Negril Point Light House.

† Hope Gardens. Bar. read at 9 a.m. and 3 p.m.

Wind 11 p.m. E.N.E. 9.7

Plumb Point Light House { Average No. of Miles of wind per diem 129
 Greatest on the 31st 226
 Least on the 25th 68

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

Nov., 1915.						
NORTH-EASTERN DIVISION.	Total Fall.	Greatest fall in 24 hours.		Days on which 0.61 or more fell.	Average.	
		Amount.	Date.			
	In.	In.			In.	
Manchioneal	17.71	3.84	2	12	14.23	
Spring Valley, Portland	20.45	3.14	5	23		
Bath	20.13	4.40	26	25	12.95	
Boston	13.73	2.61	9	18	13.51	
Moore Town	66.53	8.30	25	19	34.15	
Port Antonio	20.56	3.63	10	21	16.39	
Fellowship	38.99	8.70	10	25	27.14	
Windsor, Portland						
Johnson River Bridge	13.37	3.63	26	23	6.70	
Shrewsbury	56.17	10.36	26	20	29.32	
Cedar Valley, St. Thos.	17.91	3.00	2	14	13.08	
Hope Bay	35.00	8.00	26	27		
Moy Hall, St. Thos.	21.53	3.25	26	15	13.14	
Brookledge	19.11	2.44	25	22		
Lennox	40.25	7.75	13	28		
Farm Hill	37.75	7.20	10	15	34.16	
Hill Gardens	27.72					
Buff Bay	28.23	8.00	13	18	16.12	
Vinery	31.59	7.00	13	18		
Windsor Castle, Port.	22.06	7.27	13	19		
Greenville, Portland	62.40	8.00	26	21		
Mt. Holstein	54.03	13.43	25	24	26.11	
Irish Town	9.31	3.00	7	9	12.01	
Rose Hill	21.18	5.00	10	13		
Hardware Gap	18.50				13.02	
Stony Hill Ind. School	8.77	3.00	25	17	7.14	
Castleton Gardens	41.83					
Lawrence Tavern	17.50	8.00	25	7	8.33	
Cedar Valley, Red Hills	3.33	0.58	25	10		
Carew Castle	10.44	4.12	25	14	9.36	
Aqualta Vale	20.90	5.07	13	17		
Water Valley	20.63	4.89	6	16	10.01	
Albany, Ry. Station	21.16	5.34	13	14		
Platfield	30.46	8.00	26	21		
Richmond, St. Mary	24.82	5.88	26	19	11.65	
Hampstead, St. Mary	53.56	6.22	12	23		
Troja						
Gay's Hill	13.92	2.85	26	16		
Lucky Hill	30.58	5.00	13	18		
Rio Hoe	14.79	2.40	26	15	9.40	
Unity Valley	12.61	3.80	6	20	9.01	
Moneague	12.72	4.00	6	18	9.90	
Claremont	13.95	2.80	27	12	10.46	
Albion, St. Ann	13.11	2.90	6	15	9.74	
Averham Park	16.88	4.03	6	14	11.85	
Mean	23.10					

CENTRAL SUB-DIVISION.						
	Total Fall.	Greatest fall in 24 hours.	Days on which 0.61 or more fell.	Average.		
	In.	In.		In.		
Dryan Castle	7.25	1.40	29	17	0.40	
Braco	4.70	0.80	10	10	5.88	
Arcadia	11.19	2.25	26	12	6.47	
Lancaster	5.45	1.10	8	8	6.34	
Harmony Hall	5.22	1.20	10	16	5.75	
Vale Royal	8.80	2.40	26	10	7.30	
Colchis Pent	3.98	1.40	29	11	5.81	
Swanswick	11.40	4.16	25	47		
Georgia	7.65	2.35	26	12	5.52	
Long Pond	9.66	3.40	25	16		
Hyde Hall	7.91	2.75	25	15		
Steelfield	9.34	2.97	26	12		
Etingdon	7.66	1.87	26	17		
Lottery	8.85	1.55	25	15	5.38	
Falmouth	5.24	1.00	6	18	4.92	
Florence Hall	6.10	1.65	2	12		
Good Hope	7.73	1.85	25	16		
Unity	6.29	2.22	25	11		
Kent	6.53	1.95	16	15		
Gales Valley						
Canaan	7.14	1.40	26	16	5.03	
Content	5.75	1.00	26	18		
Bellfield	4.60	0.85	25	15		
Guildsbro	8.34	1.98	25	24	5.78	
Glasgow	8.03	1.62	26	17		
Moor Park	8.30	3.00	26	11	7.90	
Rose Hall	6.45	2.95	12	15		
Running Gut	6.85	3.15	12	15		
Cinnamon Hill	7.04	2.10	12	15		
Success	5.87	2.08	12	16		
Montego Bay	5.04	1.50	2	16	4.30	
Catherine Hall						
Retirement	9.27	2.09	4	19		
King Gate	3.86	0.82	26	11	3.86	
Round Hill						
Blue Hole	4.31	0.98	3	10		
Haughton Court	7.00	1.52	18	9		
Lucea	7.01	2.50	4	11	5.71	
Green Island, Police St.	4.61	3.70	4	11		
Mean	9.70					

* Gauge overflowed 4 times in the month.

† Gauge overflowed.

WEST-CENTRAL DIVISION.	NOV., 1915.					SOUTHERN DIVISION.	NOV., 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
	In.	In.			In.		In.			In.	
Whitney	15.10	9.25	31	9	7.91	Morant Point L. H.	10.12	1.62	4	20	6.90
Mochos, Clarendon	2.60	1.00	2	5	...	Elliott Hill	23.05	6.49	1	25	...
Baillieston	8.08	2.39	2	20	5.25	Pleasant Hill	16.06	3.14	3	20	...
Brokenhurst	11.60	4.10	1	15	6.21	East Prospect	11.42	2.15	3	17	...
Christiana	6.29	2.10	2	20	6.82	Morant Bay	10.34	2.25	13	17	6.44
Chudleigh	6.93	1.00	2	16	...	Easington	7.34	1.25	14	14	5.35
Shooter's Hill	8.24	1.64	5	18	...	Bull Bay	...	...	...	...	...
Spitzbergen	7.89	1.50	2	16	...	Gordon Town	9.03	2.50	6	13	9.57
Kendal, Manchester	6.24	2.10	15	9	5.99	Hope Gardens	5.96	...	...	...	...
Marshalls Pen	10.61	1.85	27	14	6.10	King's House Gardens	4.08	...	...	...	...
Mandeville	10.34	2.02	27	17	6.29	Melrose	5.69	1.70	7	10	...
Carlton, Mandeville	6.36	1.85	26	14	6.29	Halfway Tree	4.55	1.65	7	8	...
The Hill	7.65	1.78	27	13	...	Lunatic Asylum	2.09	0.64	7	11	3.57
Fairfield, Manchester	6.12	0.95	28	18	6.46	Upper Elletson Road	2.96	0.51	13	14	...
Ulster Spring	6.74	1.75	4	12	6.49	Kingston P. W. Office	2.37	0.80	7	11	3.00
Freeman's Hall	3.65	0.70	6	10	...	Plumb Point L. H.	3.59	1.10	13	9	2.32
Albert Town	2.33	0.54	6	10	...	Clifton Pen	...	...	...	...	...
Lowe River	3.68	1.15	2	14	9.12	Quarantine Station	3.31	0.81	10	8	...
Troy	4.93	1.20	6	6	6.46	Spanish Town	2.46	0.41	10	10	3.56
Windsor Pen, Trel.	5.22	1.80	4	17	6.03	Hog Hole, St. Catherine	2.92	0.66	5	13	4.34
Medina	7.33	3.55	27	13	...	Hartlands	4.50	1.40	15	10	6.06
Wallingford	7.90	3.16	4	13	...	Belmont, Guanaboa Vale	3.45	0.66	4	14	...
Balaclava Police Station	8.31	4.47	4	11	5.91	Old Harbour	3.97	0.70	8	10	3.60
Siloah	9.30	1.90	1	13	8.94	May Pen	3.61	0.80	1	11	4.51
Appleton Estate	...	...	...	...	...	Hillside	...	...	...	...	...
Maggotty	6.28	1.40	21	13	6.80	Moreland	...	...	...	...	...
Butlers	7.48	1.60	26	12	...	Money Musk	...	...	...	...	...
Dromilly Pen	5.95	2.33	18	11	...	Dunkley's, Vere	4.43	1.50	14	11	3.92
Spring Vale	4.54	1.44	4	8	6.08	Dry River "	4.08	2.01	14	12	...
Garland	...	...	...	...	...	Denbigh	4.20	1.45	13	6	4.79
Mochos, Catadupa	...	...	...	...	...	Toll Gate	4.83	0.89	14	11	...
Springfield, St. Elizabeth	15.12	3.00	28	14	...	Woodleigh	4.55	1.50	13	6	...
Chesterfield, St. James	...	...	...	...	...	New Yarmouth	4.19	2.08	14	6	2.66
Catadupa Rly. Station	5.78	1.58	2	12	...	Exeter, Vere	...	...	...	...	...
Kempshot	4.96	1.20	4	16	6.18	Rhymesbury	5.74	1.79	14	12	3.58
Cambridge, St. James	4.64	1.32	4	10	...	Milk River	...	...	...	...	...
Ducketts	...	...	...	...	...	Clarendon Pk. Ry. St.	...	...	...	...	...
New Market, Police St.	8.19	1.35	5	10	...	Victoria Town	6.76	1.79	2	8	4.53
The Bog, New Market	6.96	1.11	28	13	...	Hog Hole, S. Manch.	6.29	1.18	14	9	...
Kew Park	4.37	1.54	2	11	5.52	Stone's Hope	7.95	1.80	3	11	5.01
Knockalva	3.40	1.13	2	10	...	Newport, Manchester	7.40	1.15	3	19	6.29
Ramble	...	...	...	...	...	Great Valley, Man.	6.68	1.65	27	13	4.24
Petersville	4.20	1.72	6	13	6.49	Alligator Pond	3.25	1.36	27	5	2.97
Darliston	8.81	2.04	27	14	7.48	Southfield, St. Elizabeth	4.49	1.25	27	7	...
Bluefields	3.88	0.89	6	9	8.63	Lititz	3.46	0.76	27	16	...
Whithorn	6.40	2.75	2	15	6.92	Long Hill	...	...	...	...	...
Water Works Pen	6.43	2.00	4	11	...	Torrington	5.50	1.12	27	9	6.99
Great Valley, Han.	8.23	1.83	4	9	5.81	Bethlehem, St. Eliz.	10.46	2.12	24	14	7.32
Prospect Park	...	...	...	...	...	Santa Cruz	5.07	1.05	5	17	5.89
Blackheath	4.54	1.72	31	7	...	Pedro Plains Police St.	2.72	0.65	3	8	4.01
Fontabelle, Westm.	5.62	1.78	28	8	3.02	Mountainside	10.64	4.80	27	12	...
Belleisle	...	...	...	...	...	Black River	2.79	0.64	24	14	4.53
Morgan's Bridge	4.58	1.57	27	8	5.30	Font Hill	2.55	1.45	6	6	5.32
King's Vale Police St.	4.26	2.25	4	11	5.46	Mount Edgecombe	2.43	0.83	10	13	5.00
Mean	6.48	...	...	...	...	Sweet River	...	...	...	...	...
						Windsor, Sav.-la-mar	1.57	0.67	15	10	3.64
						Orchard	3.08	0.68	26	9	...
						Sav.-la-mar	1.24	0.46	15	6	3.10
						Meylersfield	2.62	1.63	26	4	...
						Little London	1.31	0.39	7	6	...
						Retreat	1.76	0.93	27	4	4.79
						Negril Point L.H.	2.05	0.99	15	7	3.21
						Mean	4.69	...	...	...	...

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

DIVISIONAL AND ISLAND RAINFALL.	NOV.	
	1915.	Average.
	In.	In.
North-Eastern Division	23.10	13.54
Northern "	9.70	5.91
West-Central "	6.48	5.74
Southern "	4.69	4.56
The Island	11.01	7.44

Very heavy rains fell in parts of the north-eastern division between the 25th and 27th which brought the rivers down in flood; 66½ inches fell at Moore Town, 62½ at Greenvale, and 54 at Mount Holstein, near the sources of the Rio Grande, Spanish and Buff Bay rivers, respectively. On the other hand, only one or two inches fell between Sav.-la-Mar and Negril Point Light House.

SHOCKS OF EARTHQUAKE IN NOV., 1915.

Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, etc.
	hr. min.		
24	5.15 p.m.	I	Buff Bay. Very slight rumbling sound.

CORRIGENDUM.

W. R. No. 448, Oct. 1915, p. 3, S. div. Melrose; for 8.01 read 12.48; for 2.40 read 4.47; for 30 read 31.

Montego Bay P.O.

MAXWELL HALL,
Government Meteorologist.

STORMS AND HURRICANES IN JAMAICA.

The following list of Storms and Hurricanes which have done more or less damage in Jamaica, between the years 1655 and 1915, has been carefully prepared; they were all previously given in the Introduction to Vol. II. of the "Jamaica Weather Reports," together with other physical events, excepting the few which have occurred since the commencement of the Weather Service in 1880.

In the year 1900 the United States Weather Bureau published an important work on "West Indian Hurricanes" by Prof. E. B. Garriott, and in that work is given Poey's "Chronological Table of 365 West Indian and North Atlantic Hurricanes from 1493 to 1855;" and among the latter there are as many as 23 which are referred to Jamaica, of which no mention is made in the early histories, magazines, journals, &c., of Jamaica, so far as research has at present ascertained.

Of these 23 hurricanes there are indications that some of them were felt by ships at sea, and that some of them were inserted by accident;* and it is proposed to omit all these "hurricanes."

Mr. Frank Cundall, the Secretary of the Institute of Jamaica, has given most valuable assistance by searching the old records in the Institute, and by revising the authorities given in the following list.

Again, in several charts issued by the United States authorities in recent times, tracks of the centres of cyclones are sometimes made to pass over Jamaica, so that it is to be presumed that storms or hurricanes must have occurred in Jamaica at the time of passage.

The following list of tracks across some part of Jamaica either require explanation, or the statement that they were not accompanied by any storm so that the tracks require revision:—

- | | | |
|----|-----------------|-----------------------------------|
| 1. | 1879, Aug. 16, | Over E end of Jamaica. |
| 2. | 1880, Aug. 19, | " W " " |
| 3. | 1886, Aug. ? | " W " " |
| 4. | 1886, Sept. 17, | Over Kingston and across Jamaica. |
| 5. | 1889, Aug. ? | Across middle of Jamaica. |
| 6. | 1889, Sept. 15, | Along the " " |
| 7. | 1905, Oct. 5, | Across the " " |
| 8. | 1908, Sept. ? | " " " |

No. 1. In Clarendon there were very heavy rains that month; and heavy rains fell over the eastern end of the Island, but there was no storm.

No. 2. Probably refers to the hurricanes of Aug. 18, 19, which greatly damaged Kingston and the eastern half of the Island. It was not felt at the W. end.

No. 3. Probably refers to the hurricane of Aug. 19, 20, which passed over Kingston and the middle of the Island.

No. 4. The weather in Jamaica was undisturbed.

No. 5. do. do. do.

No. 6. On the 14th the weather was greatly disturbed, but the indications were uncertain: the telegraph offices were kept open that night, and it was not until 10 p.m. that the final hurricane warning was issued. But there was no storm or hurricane; and it was afterwards found that two storms had passed, one along the north side and one along the south side of Jamaica, and that the winds were nearly calm between them. (W. R. No. 109).

No. 7. Between the 1st. and the 6th. Oct., a depression generated a little to the N.W. of Jamaica; it moved round the west end in a circle, the centre crossing the Island on the night of the 5th. and 6th.; there was very little wind, and the lowest bar. was only 0.26 in. below the mean.

No. 8. On Sept. 26th a cyclone passed south of Porto Rico on a westerly course and threatened Jamaica; but the cyclone curved to the N.W. and passed over Port-au-Prince. There was no storm in Jamaica.

It may be thought that more attention has been given to this subject than was necessary. But it seems proper that notes of the great historic hurricanes should be collected, and that the information gained by the Weather Service respecting more recent hurricanes should be analysed and the results put into a tangible form, and the work has naturally to be prefaced by a list of the Storms and Hurricanes which have actually occurred.

The following explanation of the terms used and of cyclonic action may be useful:—

I. A barometric "depression" over a large area involves weather "disturbance;" the low barometer is always accompanied by rain, sometimes by very heavy rain; and if the depression is not speedily filled up and disappears, the wind begins to circulate about its centre in a direction contrary to that of the hands of a watch laid face upwards on a table.

II. When this action is continued, the barometer gradually falls at the centre, the wind sweeps faster round the centre, and the system thus established is called a "cyclone."

III. At the centre there is a calm area; and when a cyclone is fully developed, the wind near the calm area moves round it with "hurricane" force as a rule.

IV. This cyclonic system does not remain stationary, but as a rule the centre moves in a straight or curved course with a speed of ten or twenty miles an hour.

To distinguish between gales, storms, and hurricanes, a Wind Scale is necessary; and the simplest scale possible was given by the U. S. Signal Service in the "Instructions to Observers" 1881. It is as follows:—

	Miles per hour.
Light	1 to 2
Gentle	3 .. 5
Fresh	6 .. 14
Brisk	15 .. 24
High	25 .. 39
Gale	40 .. 59
Storm	60 .. 79
Hurricane	80 and upwards

* For instance the great earthquake of 1692, June 7, is inserted as a hurricane. The weather that day at Port Royal was particularly close and hot.

Now the force or pressure of the wind varies as the square of its velocity, so that a storm of 70 miles an hour has twice the violence of a gale of 50 miles an hour; and this makes a fair distinction between the two, the former being destructive. As for the hurricane, it is generally beyond description; and the nature of all high winds to blow in gusts, culminates in the hurricane with terrible effect.

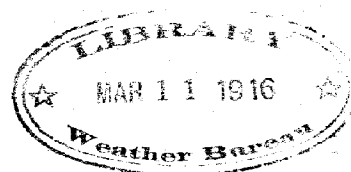
Having cleared the way, as it were, we can now give the list; it should however be mentioned, that the "storm" of 1904, June 13th, only just reached the limit of 60 miles an hour, and that it is retained on account of the unusual interest connected with two cyclones at the west end of the Island.

STORMS AND HURRICANES IN JAMAICA, FROM 1655 TO 1915.

			Authority, Notes, &c.
1670	Oct. 7	Storm; the fleet at Jamaica driven ashore.	[Poey: Keith Johnstone, Physical Atlas, 1856.
1689		Storm mentioned in the earlier volumes of the Jamaica Almanac.	Gardner refers to it as a hurricane, Ed. of 1909, p. 73.
1712	Aug. 28	The first hurricane experienced by the English in Jamaica.	[Poey: Gardner, p. 112.
1714	Aug. 29	Some vessels—men-of-war—were driven ashore during a storm.	[Poey: Keith Johnstone, Phys. Atlas.
*1722	Aug. 28	Great hurricane which damaged the whole Island. The centre passed over Port Royal.	Atkins, "A voyage to Guinea, Brazil, and the West Indies," 1737, p. 238; Long, Vol. II. p. 145.
1726	Oct. 22	Hurricane, which swept the east end of the Island.	Long, Vol. II. p. 146; Gardner, p. 115.
*1744	Oct. 20	Great hurricane which damaged the whole Island; 104 ships wrecked in harbour.	Clowes, III. 275; Long, II. 146; Gardner p. 125.
1751	Sept. 2	Storm.	Jamaica Almanac.
*1780	Oct. 3	Great hurricane which destroyed Savannah-la-Mar, and damaged the whole Island.	William Beckford, "Descriptive Account of the Island of Jamaica, 1790; Bryan Edwards, Ed. of 1819, I. 236; Col. Reid, "Law of Storms" &c.
1781	Aug. 1	Hurricane; 120 vessels wrecked in Kingston harbour and at Port Royal.	Bryan Edwards, I. 234; brief reference only.
1784	July 30	Hurricane; all but 4 of the vessels at Kingston and Port Royal were wrecked.	" " "
1785	Aug. 27	Storm.	" " "
1786	Oct. 20	Storm, followed by great scarcity of food.	" " "
*1812	Oct. 12-14	Great hurricane which damaged the whole Island.	Jamaica Magazine: J. Physical Journal, 1835.
1813	Aug. 1	Storm which damaged shipping and buildings in Kingston.	J. Courant, Aug. 2-9, 1813; Bryan Edwards, V. 77.
"	Aug. 28	Storm at Savannah-la-Mar which wrecked vessels.	
1815	Oct. 18, 19	Hurricane over eastern part of the Island, and great floods.	J. Phys. Journal, 1835: Bryan Edwards, V. 78. Great destruction of houses in St. George, St. David, &c., see also Weather Report No. 352, April. 1908.
1818	Nov. 18, 20	Hurricane swept the western part of the Island.	
1832	Aug. 7	Violent storm which lasted only 3½ hours.	Keith Johnstone, Phys. Atlas.
1837	Sept. 26, 27	Storm, probably felt all over the Island.	J. Despatch; Col. Reid, "Law of Storms."
1844	Oct. 5	Storm over the western end of the Island, Falmouth, Montego Bay, and Black River.	
1874	Oct. 31	Hurricane over the eastern half of the Island.	
	Nov. 2	Centre passed over St. Ann's Bay.	
*1880	Aug. 18	Great hurricane: two cyclones damaged the eastern half of the Island.	J. Weather Reports: Vol. I. Introduction.
1886	June 27	Storm, the centre of which passed rapidly from the east end to Montego Bay.	W.R. No. 67.
"	Aug. 19, 20	Hurricane, the centre of which took nearly the same course.	W.R. No. 69
*1903	Aug. 11	Great hurricane, the centre of which took nearly the same course	U. S. Monthly Weather Review, Sept. 1905; W.R. Vol. IV. Introduction.
1904	June 13	Storm, and heavy rains over west end of the Island. Montego Bay bridge destroyed.	" Aug. 1904: W.R. Vol. IV., Introduction.
*1912	Nov. 18	Great hurricane, two cyclones devastated the west end of the Island.	W.R. No. 411.
1915	Aug. 12, 13	Hurricane, which destroyed the banana fields throughout the Island, and damaged all the towns on the northern coast.	W.R. No. 445.
"	Sept. 25, 26.	Storm.	W.R. No. 447.

* Great Hurricanes.

No. 450.



JAMAICA

WEATHER REPORT

FOR THE MONTH OF
DECEMBER, 1915.

The Bar. pressures at all the Stations, except the Hill Gardens, are reduced to the standards of Kew, 32° gravity at Lat. 45°, and mean sea-level. The bar. at Hill Gardens is reduced to the first three standards only. Thermometers are exposed in Stevenson's Screens; their readings have been corrected for instrumental errors.

The miles of Wind per diem are measured by Robinson's Anemometers, the factor 3 being assumed correct for the small instruments used and for the small velocities measured.

The amount of Cloud is given in tenths of the whole sky; the Lower clouds are for the most part fracto-stratus; the Middle clouds, cumulus; and the Upper clouds, cirro-stratus.

METEOROLOGICAL RESULTS.

STATIONS.	Elevation.	Bar. Pressure.		Temperature.					Extreme Temperature.			
		7 a.m.	3 p.m.	7 a.m.	3 p.m.	Max.	Min.	Range	Max.	Date.	Min.	Date.
Morant Pt. Light House	8	29.994	29.968	79.4	81.9	83.0	76.8	6.2	86.5	9	70.0	13
Kingston	24	29.958	29.911	71.4	82.9	85.7	70.4	15.3	88.1	30	68.1	2
Negril Point Light House	33	29.955	29.902	74.4	82.9	85.5	72.0	13.5	89.2	31	68.6	27
Castleton Gardens	496	..	..	69.2	81.8	84.9	68.3	16.6	90	13	64	18
Hope Gardens†	668	29.975	29.887	70.1	83.1	88.6	66.5	20.1	90	16*	64	15*
Stony Hill Indus. School	1,400	..	..	68.6	79.0	81.6	67.1	14.5	86	30	65	25*
Hill Gardens	4,900	25.291	25.263	60.7	6.4	6.8	55.6	12.4	72	30	54	2*

STATIONS.	Elevation.	Dew Point and Humidity.		Rainfall.	Wind per diem.	Wind: direction from and miles per hour.				Amount of Cloud. Lower, Middle and Upper.					
		7 a.m.	3 p.m.			7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.	7 a.m.	3 p.m.
Morant Pt. Light House	8	71.8	78	72.1	72	1.83	351	NE	17	NE	16	3.5	0.8	2.1	3.3
Kingston	24	67.5	87	72.1	70	0.56	96	N	3.8	SE	6.4	1.4	1.3	3.1	2.3
Negril Point Light House†	33	68.1	81	71.1	68	1.33	233	NE	11.5	NE	12.2	2.5	0.0	2.2	2.1
Castleton Gardens	496	67.4	93	71.6	72	17.68	..	..	..	..	..	..	..	..	..
Hope Gardens	668	65.3	84	71.2	67	22.2	..	..	..	..	..	..	..	..	..
Stony Hill Indus. School	1,400	66.1	91	74.8	87	2.26	..	..	..	..	..	..	..	..	..
Hill Gardens	4,900	57.5	89	60.8	90	1.01	..	..	..	..	..	..	..	..	..

* and on other days.

† Negril Point Light House. Wind 11 p.m. N.E. 10.1

Plumb Point Light House { Average No. of Miles of wind per diem 138
 { Greatest on the 25th 305
 { Least on the 1st 68

THE RAINFALL.

THE first four columns contain all the information relating to the Rainfall for the month received for publication up to the time of sending this report to press; the last column contains the corresponding Rainfall average for the month according to "The Rainfall of Jamaica from about 1870 to the end of 1909." In obtaining the mean Rainfall for the month only those Stations are considered for which the average Rainfall has been also given in the last column, so that the results of these two columns are comparable for each division. These results are reproduced in the comparative table at the end of this Rainfall Return, so as to arrive at the mean for the whole Island, embracing the four divisions.

The Northern division comprises the northern shores from Port Maria to Davis' Cove, including the central part of the Island which form the Central sub-division; the Southern division comprises the southern shores from Holland Bay to South Negril; The North-Eastern and West-Central divisions are the remaining parts of the Island bounded by the sea and the other divisions.

NORTH-EASTERN DIVISION.	DEC., 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Manchioneal	8.06	1.76	5	9	8.02
Spring Valley, Portland	13.88	7.79	21	13	...
Bath	6.99	1.43	21	15	8.80
Boston	10.33	3.45	5	10	9.92
Moore Town	46.70	9.60	4	13	25.39
Port Antonio	16.37	4.25	5	15	13.78
Fellowship	28.62	10.45	4	23	19.92
Windsor, Portland	...	...	...	...	...
Johnson River Bridge	2.44	0.54	24	13	5.53
Shrewsbury	33.78	14.80	4	21	24.66
Cedar Valley, St. Thos.	2.31	1.24	25	6	...
Hope Bay*	22.35	8.00	4	20	...
Moy Hall, St. Thos.	3.25	2.50	21	3	5.94
Brooklodge	4.08	1.58	15	11	...
Lennox	...	...	...	...	...
Farm Hill	7.15	2.70	31	4	10.94
Hill Gardens	...	...	...	...	...
Buff Bay	23.37	4.45	5	16	11.81
Vinery	27.25	4.60	4	20	...
Windsor Castle, Port.	18.58	3.08	21	16	...
Greenvale, Portland	34.00	14.80	4	14	...
Mt. Holstein	19.85	6.63	30	24	17.04
Irish Town	2.25	0.83	5	4	4.62
Rose Hill	5.42	2.00	30	6	...
Hardware Gap	4.50	...	...	...	6.86
Stony Hill Ind. School	2.26	0.75	24	8	4.16
Castleton Gardens	...	...	...	...	...
Lawrence Tavern	8.00	2.50	30	5	4.48
Cedar Valley, Red Hills	1.16	0.64	24	3	...
Carew Castle	4.47	2.35	30	9	...
Agualta Vale	19.74	6.35	16	20	...
Water Valley	20.49	6.10	16	19	6.83
Albany, Ry. Station	19.51	6.20	16	18	...
Platfield	10.31	2.00	31	12	...
Richmond, St. Mary	10.31	3.67	4	18	9.50
Hampstead, St. Mary	26.76	5.36	25	19	...
Troja	...	...	...	...	...
Guy's Hill	7.63	2.50	4	12	...
Lucky Hill	25.29	5.00	6	23	...
Rio Hoe	8.77	1.75	4	17	9.10
Unity Valley	7.21	1.29	30	15	7.66
Moneague	5.51	0.83	4	14	7.60
Claremont	7.05	1.25	3	12	8.49
Albion, St. Ann	7.01	1.81	4	16	8.19
Averham Park	11.41	1.70	3	17	10.41
Mean	12.61	...	...	...	...

* Gauge overflowed

NORTHERN DIVISION.

	DEC., 1915.				
	Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.		
	In.	In.			In.
Port Maria	10.39	2.10	21	17	8.06
Ocho Rios	9.28	2.50	16	10	5.74
Bogue, Ocho Rios	10.58	2.45	4	11	...
Rockfield	17.76	3.75	14	16	...
Drax Hall	8.60	1.59	16	18	8.47
Liberty Hill	13.98	3.60	4	19	...
St. Ann's Bay	9.40	1.96	16	23	7.07
Seville	11.11	2.50	16	19	7.77
Richmond Estate	...	...	...	...	...
Llandovery	15.11	2.68	16	16	8.17
Runaway Bay	10.80	2.60	14	13	...
Brown's Town	12.23	4.20	14	13	8.85
Alexandria	2.27	0.63	30	7	...
Chewmagna, St. Ann	3.01	0.90	5	12	3.38
Home Castle	15.35	6.95	14	16	7.63
Richmond Pen	6.90	2.50	14	17	4.86
Mahogany Hall	6.23	2.46	14	14	6.74
Barnstable	10.03	5.60	14	9	...
Brampton Bryan	...	...	...	...	...
Bryan Castle	12.40	5.50	14	16	6.54
Braco	11.10	4.00	14	12	5.80
Arcadia	16.84	4.77	14	11	6.78
Lancaster	12.11	4.80	14	10	6.54
Harmony Hall	13.02	6.17	14	15	6.13
Vale Royal	11.21	3.20	14	10	7.88
Colchis Pen	2.89	1.26	14	8	4.47
Swanswick	13.40	3.50	23	12	...
Georgia	...	...	...	...	...
Long Pond	8.15	2.55	14	12	...
Hyde Hall	8.32	2.40	14	12	...
Steelfield	8.80	2.25	14	11	...
Etingdon	7.19	2.48	14	10	...
Lottery	6.00	1.45	14	10	5.54
Falmouth	3.71	0.70	14	14	5.17
Florence Hall	5.43	1.50	16	7	...
Good Hope	7.18	1.25	23	13	...
Unity	3.61	1.07	5	8	...
Kent	5.18	1.50	22	11	...
Gales Valley	...	...	...	...	...
Canaan	7.51	1.38	15	17	5.03
Content	4.59	1.59	12	9	...
Bellfield	4.72	1.53	13	9	...
Gullsbro	4.48	1.62	13	15	...
Glasgow	5.37	1.72	13	13	...
Moor Park	4.05	1.19	13	9	5.95
Rose Hall	2.50	0.70	23	7	...
Running Gut	2.75	0.90	23	7	...
Cinnamon Hill	2.50	0.50	23	7	...
Success	2.93	1.50	21	7	...
Montego Bay	1.21	0.73	3	5	4.75
Catherine Hall	...	...	...	...	...
Retirement	2.74	0.82	3	12	...
King Gate	1.21	1.45	3	4	3.74
Round Hill	...	...	...	...	...
Blue Hole	2.97	1.44	3	4	...
Haughton Court	...	...	...	...	...
Lucea	1.82	0.45	22	6	3.95
Green Island, Police St.	0.59	0.35	22	2	...
CENTRAL SUB-DIVISION.					
Headworks, Rio Cobre	0.20	0.20	14	1	2.05
Linstead	3.81	0.96	21	7	...
Berkshire Hall	3.97	1.75	4	12	4.36
Point Hill	2.66	1.00	5	9	5.92
Marlie Hill	1.10	0.61	21	3	...
Worthy Park	2.24	0.90	5	4	2.68
Croft Hill	3.47	1.34	5	3	...
Chapelton	3.31	1.12	15	7	2.47
Danks Works	4.52	1.28	21	7	2.57
Savoy House	4.04	1.31	14	7	2.81
Crooked River	...	...	...	...	...
Trout Hall	...	...	...	...	...
Frankfield	...	...	...	...	...
Cave Valley	...	...	...	...	...
Mean	7.90	...	...	...	...

WEST-CENTRAL DIVISION.	DEC., 1915.					SOUTHERN DIVISION.	DEC., 1915.				
	Total Fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.		Total fall.	Greatest fall in 24 hours.		Days on which 0.01 or more fell.	Average.
		Amount.	Date.					Amount.	Date.		
	In.	In.			In.		In.			In.	
Whitney	3.75	1.10	5	7	2.82	Morant Point L. H.	1.83	0.39	19	13	6.41
Mochó, Clarendon	4.84	1.25	5	5	...	Elliott Hill	7.05	1.96	6	19	...
Baillieston	2.31	0.95	23	6	2.44	Pleasant Hill	6.65	1.90	5	14	...
Brokenhurst	3.15	1.40	14	6	3.80	East Prospect	...	...	...	...	...
Christiana	1.71	0.66	22	7	3.68	Morant Bay	3.39	0.74	21	9	4.52
Chudleigh	3.60	2.75	21	5	...	Easington	1.37	0.95	24	4	3.31
Shooter's Hill	2.96	1.45	24	6	...	Bull Bay	0.80	0.80	24	1	1.75
Spitzbergen	3.15	1.80	21	8	...	Gordon Town	2.93	1.00	4	5	3.37
Kendal, Manchester	1.65	1.50	24	2	2.92	Hope Gardens	...	...	...	...	...
Marshalls Pen	...	...	...	...	...	King's House Gardens	...	...	...	...	...
Mandeville	1.69	0.80	24	7	3.62	Melrose	1.44	0.63	5	7	...
Carlton, Mandeville	1.06	0.78	24	5	3.62	Halfway Tree	1.70	1.25	24	2	2.12
The Hill	2.71	0.88	14	6	...	Lunatic Asylum	0.69	0.68	24	2	2.03
Fairfield, Manchester	3.27	1.77	6	10	2.94	Upper Elletson Road	0.80	0.68	24	3	...
Ulster Spring	6.24	3.00	5	11	4.26	Kingston P. W. Office	0.56	0.49	24	2	1.78
Freeman's Hall	1.85	0.55	14	7	...	Plumb Point L. H.	0.66	0.63	24	2	1.60
Albert Town	4.70	1.50	5	8	...	Clifton Pen	0.50	0.50	29	1	...
Low River	1.16	0.30	2	6	4.00	Quarantine Station	0.55	0.55	24	1	...
Troy	7.63	3.50	10	4	3.58	Spanish Town	1.90	1.47	14	4	2.08
Windsor Pen, Trel.	3.08	1.40	21	7	4.51	Hog Hole, St. Catherine	2.32	0.50	5	5	2.83
Medina	1.48	0.63	24	5	...	Hartlands	1.16	1.28	23	6	2.23
Wallingford	5.02	1.56	6	7	...	Belmont, Guanaboa Vale	0.72	0.16	24	6	...
Balaclava Police Station	2.89	1.90	6	5	2.42	Old Harbour	0.00	...	...	...	...
Siloah	7.01	2.15	5	8	3.57	May Pen	1.54	1.32	14	3	2.40
Appleton Estate	...	...	...	...	...	Hillside	...	...	...	...	...
Maggotty	0.84	0.32	21	5	2.98	Moreland	...	...	...	...	...
Butlers	1.65	1.30	24	2	...	Money Musk	0.73	0.39	14	2	...
Dromilly Pen	...	...	...	...	...	Dunkley's, Vere	...	...	...	...	...
Spring Vale	2.83	0.80	13	9	6.27	Dry River	1.64	0.85	24	3	...
Garland	...	...	...	...	...	Denbigh	...	...	...	...	...
Mochó, Catadupa	2.31	0.48	21	5	...	Toil Gate	2.83	0.85	6	5	...
Springfield, St. Elizabeth	1.58	0.97	24	5	2.61	Woodleigh	...	...	...	...	...
Chesterfield, St. James	1.64	0.40	21	9	...	New Yarmouth	1.08	0.83	24	2	1.97
Catadupa Ry. Station	1.97	0.65	3	11	5.40	Exeter, Vere	...	...	...	...	...
Kempshot	1.06	0.38	5	5	...	Rhymesbury	2.86	1.97	6	6	2.23
Cambridge, St. James	...	...	...	...	...	Milk River	1.46	1.00	28	4	2.48
Ducketts	...	...	...	...	...	Clarendon Pk. Ry. St.	...	...	...	...	...
New Market, Police St.	1.29	0.65	6	3	...	Victoria Town	2.76	1.25	24	4	3.03
The Bog, New Market	3.29	2.60	6	6	...	Hog Hole, S. Manch.	3.08	1.44	24	5	...
Kew Park	0.52	0.22	5	3	2.67	Stone's Hope	1.25	1.25	28	1	...
Knockalva	1.35	0.49	3	7	...	Newport, Manchester	2.46	1.28	24	9	4.11
Ramble	...	...	...	...	...	Great Valley, Man.	0.93	0.30	24	5	2.77
Petersville	2.58	1.06	24	6	2.72	Alligator Pond	0.81	0.50	14	3	2.70
Darliston	2.49	1.80	24	5	3.47	Southfield, St. Elizabeth	0.66	0.56	23	2	...
Bluefields	...	...	...	...	...	Lititz	2.07	1.75	7	3	...
Whithorn	1.95	0.95	5	9	2.94	Long Hill	...	...	...	...	...
Water Works Pen	0.90	0.70	24	3	...	Torrington	0.49	0.38	24	2	2.72
Great Valley, Han.	2.90	1.00	21	5	5.13	Bethlehem, St. Eliz.	2.46	1.52	6	5	...
Prospect Park	...	...	...	...	...	Santa Cruz	2.03	0.78	5	24	2.7
Blackheath	3.15	2.12	28	3	...	Pedro Plains Police St.	1.72	1.18	7	2	1.28
Fontabelle, Westm.	...	...	...	...	...	Mountainside	0.94	0.25	23	5	...
Belleisle	...	...	...	...	...	Black River	1.75	0.52	30	5	2.27
Morgan's Bridge	2.01	0.90	24	5	3.28	Font Hill	2.60	1.00	21	5	2.08
King's Vale Police St.	2.55	1.40	12	4	3.33	Mount Edgecombe	3.10	1.27	24	6	2.44
Mean	2.75	...	...	...	...	Sweet River	1.75	1.65	24	2	2.46
						Windsor, Sav.-la-mar	0.89	0.68	24	3	2.48
						Orchard	1.04	0.83	24	3	...
						Sav.-la-mar	0.58	0.30	24	4	2.36
						Meylersfield	0.31	0.14	24	3	...
						Little London	0.49	0.17	18	4	0.47
						Retreat	0.74	0.74	18	1	...
						Negril Point L.H.	1.36	0.69	18	7	2.12
						Mean	1.53	...	...	...	...

NOTES.

COMPARATIVE TABLE OF RAINFALL.

(Based upon the "Average" Stations only.)

DIVISIONAL AND ISLAND RAINFALL.	DEC.	
	1915.	Average.
	In.	In.
North-Eastern Division	12.61	10.28
Northern	7.30	5.45
West-Central	2.75	3.60
Southern	1.53	2.61
The Island	6.05	5.48

Very heavy rains fell in some parts of the north-eastern division, 47 inches at Moore Town, 34 at Shrewsbury, 34 at Greenvale and so on; while in many other parts of the island the rainfall was small and below the average.

THE ISLAND RAINFALL, 1915.

Month.	N.E.	N.	W.C.	S.	The Island.
	In.	In.	In.	In.	In.
Jan.	8.11	8.58	5.55	3.03	6.32
Feb.	6.15	3.21	4.08	2.16	3.90
Mar.	2.80	5.18	3.50	1.45	3.23
Apr.	13.43	8.02	7.54	6.09	8.77
May	7.99	5.70	7.60	4.47	6.44
June	16.97	6.65	12.30	11.69	11.90
July	6.48	4.97	8.02	3.44	5.82
Aug.	18.63	7.77	18.22	11.78	14.10
Sept.	20.59	13.20	18.43	14.52	16.68
Oct.	15.65	8.11	9.13	10.03	10.73
Nov.	23.16	9.70	6.48	4.69	11.01
Dec.	12.61	7.30	2.75	1.53	6.05
Totals	152.93	88.39	103.60	74.88	104.95

MAGNETIC VARIATION.

Kempshot.	Decl. E.
1912	2° 28'
1913	2° 30'
1914	2° 31'
1915	2° 36'

SHOCKS OF EARTHQUAKE IN DEC., 1915.

Date.	Standard Time (Approx.)	Intensity.	Notes: where felt, &c.
12	4.15 p.m.	III III II II III III II II III I III	Kingston; N. & S. .058 Melrose, Halfway Tree; N.W. & S.E. .050, 3 sec. Mt. Holstein; S.E. & N.W. .010 Gayle and Manningsfield, Vere. Butlers; N. & S. Siloah; N.W. & S.E. Mt. Edgecombe; N.W. & S.E. Petersville. Gt. Valley, Han. E. & W. Kempshot, 5 secs. Negril; N. & S. .056, 2 secs., double shock.
13	12.35 p.m. 12.5 p.m.	I I	Manningsfield, Vere. Petersville.

NOTES.

The shocks felt in the east from Kingston to Gayle, came from P due Dec. 12.2., and B3 due 14.1., according to the direction registered at Kingston and Mt. Holstein.

The shocks felt in the west came from C and D, according to the directions registered at Negril and Great Valley. But the reported directions at Butlers and Siloah do not agree with either of those western epicentres, nor yet with S.

In W. R. No. 424, p. 11 onward, attention was called to shocks at different epicentres at nearly the same time, or after an interval of 24 hours; and the shocks on Dec. 12th afford a good example of the former.

The shocks on the 13th were probably "after shocks."

But a shock was also felt at the Cayman Islands on the 12th; so that the western part of the Caribbean was disturbed and may have caused some confusion among our centres.

MAXWELL HALL,
Government Meteorologist.

Montego Bay P.O.

Month.	Bar. Pressure.		Temperature.						Extremes for the month.			Dewpoint and humidity.		Rain-fall.	Wind from and miles per hour.			Clouds : In tenths.				Weather Conditions.				
	7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.		7 a.m. 3 p.m.							
	Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.							
	Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.		Ins.							
Jan.	29.931	29.882	76.971	182.386	270.315	9.89	9.66	8.23	1.67	3.88	71.089	1.11	Ins.	NEbN	5.4	SE	11.5	NE	5.3	3.4	3.3	0.1	2.4	0.1	0.2	Rainfall about the average. Squally lat, 17th and 18th. Sea breeze throughout the night on 1st, 11th, 17th, 18th and 19th. Humidity about the mean.
Feb.	29.953	29.904	75.909	582.086	068.417	6.88	5.65	1.23	4.04	584.69	2.65	0.83	NbE	5.3	SE	12.5	NbE	5.8	0.4	2.9	0.9	2.2	0.7	0.6	0.6	Rainfall slightly above the average. Sea breeze throughout the night on 2nd, 3d and 16th. "Norther" on 7th, 13th, 14th, 15th, 19th and 20th.
March	29.934	29.885	78.272	584.487	470.316	9.89	7.67	2.22	4.66	882.71	5.65	0.58	NNE	5.3	SE	13.0	NNE	7.0	1.2	2.5	0.8	2.6	1.7	0.4	0.4	Rainfall about one-half the average. Norther on the 8th, 18th and 25th. Sea breeze throughout the nights, 19th, 20th, 22nd and 23d.
April	29.895	29.858	78.073	783.186	670.715	9.90	4.67	1.23	3.67	880.70	4.66	5.08	N	6.2	SE	10.9	NbE	5.5	1.1	2.9	1.3	2.0	2.0	1.9	1.9	Rainfall about five times the average. Sea breeze throughout the nights of 2nd, 27th and 28th. Norther on 4th and 5th. Thunderstorm on 3d, 13th and 24th.
May	29.904	29.863	80.477	884.787	673.514	10.07	9.23	1.71	280.74	3.71	3.08	237.3	NE	5.6	SE	17.8	NEbN	5.0	1.1	2.3	1.7	2.3	1.2	1.7	1.7	Rainfall three-quarters the average. Squally on 17th. Distant thunderstorm on 17th, 24th and 26th.
June	29.902	29.876	81.278	884.689	574.614	9.94	3.71	9.22	4.73	385.76	0.76	14.51	ENE	5.3	SE	13.9	ENE	4.9	1.6	3.1	0.7	2.1	2.8	2.2	2.2	Rainfall three times the average. Distant lightning 4th, 5th, 8th, 13th, 16th, 17th, 18th, 19th and 28th. Squally on 16th.
July	29.948	29.909	81.777	886.390	874.316	5.92	8.69	5.23	3.71	281.73	6.66	0.42	NE	4.5	SE	18.4	ENE	4.4	0.8	1.8	1.5	2.0	3.5	3.5	3.5	Rainfall deficient. Frequent thunderstorms.
Aug.	29.891	29.864	81.477	885.590	174.615	5.93	5.71	6.21	9.71	281.74	0.69	6.24	ENE	6.7	SE	14.4	NEbN	5.2	1.2	4.0	1.0	1.8	3.0	2.0	2.0	Rainfall nearly double the average. Frequent distant thunderstorms.
Sept.	29.861	29.828	80.677	184.688	774.214	5.93	0.71	6.21	4.72	586.74	4.72	11.90	NE	5.7	SE	9.2	ENE	6.1	1.6	3.7	1.6	1.9	2.4	2.4	2.4	Rainfall nearly three times the average. Frequent distant thunderstorms.
Oct.	29.867	29.814	80.075	883.988	773.615	1.92	5.70	8.21	7.71	888.74	3.73	10.58	NNE	5.0	SE	8.4	NEbN	4.4	1.2	2.8	1.7	1.7	3.6	3.4	3.4	Rainfall about one and a half times the average. Distant lightning on several days. Thunderstorm on 10th, 14th, 16th, 25th, 26th and 31st.
Nov	29.916	29.873	77.472	882.185	571.314	2.88	7.68	5.20	269.70	0.72	6.73	4.57	NbE	3.8	SE	5.0	NNE	4.2	2.4	4.6	0.8	1.4	2.2	1.6	1.6	Rainfall about one and-a-half times the average. Thunderstorm on 7th, 11th, 13th and 25th. Little sea breeze.
Dec.	29.958	29.911	77.171	482.985	770.415	3.88	1.68	1.20	0.67	588.72	1.70	0.56	NbE	3.8	SE	6.4	NEbN	4.2	1.4	2.3	1.3	2.2	3.1	2.0	2.0	Rainfall about one-third the average. Thunderstorm on 5th, 14th and 31st.
Total Mean	29.913	29.872	79.174	883.987	772.215	5.91	0.68	8.22	2.69	584.72	6.70	59.46	NEbN	5.2	SE	11.8	NEbN	5.2	1.6	3.0	1.0	2.1	2.2	1.8	1.8	Rainfall about 50% above the average.